THE BUILDER

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WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

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WAYS AND MEANS.

"The World is so full of a number of things
I'm sure we should all be as happy as kings."

IT is one of the privileges of youth that the young architectural student can believe that art, and the enthusiasm for it, must suffer when ways and means have to be taken into account. The mind which tries to translate architecture into dull terms of wages and capital seems to the student to provide nothing but dry bones to stimulate the creative mind. It is true that the student working at his drawing board approaches nearer to that elusive ideal of art for art's sake than his employer wrestling with administrative problems incidental to the earning of a livelihood in the profession of architecture. The increasing number of economic and social problems which have appeared during recent years have been harassing to the architect, and it is because we suspect that he has become a stern realist, whether he is aware of it or not, that we deal so frequently with these problems.

These thoughts occur to us in reading Mr. Strachey's book on economics, which we review on page 892. Here is a refreshing study of economics written in a manner so attractive and simple that, despite what we have said about the idealist and realist, there should be no excuse for those who believe that they abhor this "dismal science." The title, "Economics of the Hour," might seem to indicate some immediate remedy for the depressing industrial conditions of the moment, whereas its significance to us is that the time has now arrived to state frankly some home truths in political economy, a science which seems to have been omitted in our promised post-war Utopia. It must have become obvious to everyone by this time that though our ideals of a better England may have been praiseworthy, it was not in the power of anyone to give conditions involving the maximum of comfort with the minimum of labour. Political Economy is claimed by many to be a science, but we know of no other science where it is so easy to invert cause and effect and build up theories based upon a fallacy or a paradox.

During recent years we have all become experts in cultivating narrow areas, preferring to seek any excuse and turn to any remedy, however complicated, rather than accept a disagreeable diagnosis which might involve harder work, longer hours or less payment for our labour. We can all discuss problems like inflation and deflation, nationalisation and individualism, craftsmanship and mass production, alternations of booms and slumps, as if we were discussing sides in a University boat race. We surely know all there is to be known about foreign exchanges, stabilisation of prices, Government subsidies, safeguarding of industries; and to all of them we have turned at various times in the belief that each of them held the secret of our industrial depression. We do not mean to indicate that because Mr. Strachey avoids these modern nostrums he merely restates an old creed; on the contrary, it seems old enough to appear new to this age, brought up on patent remedies. Many of the conclusions we know have been held privately by the few, and their silence can best be explained by the fact that experience proves that a nation which has just come through a long and arduous war successfully is seldom, in the first flush, in the mood to accept dismal everyday facts, but prefers for a time to dally with an easier philosophy which promises better conditions for less labour.

Mr. Strachey confirms a belief which we hold and have discussed on several occasions, that the only way of increasing real wages permanently is by increasing production. It is obvious that our trouble to-day is that we are not producing as much as we could, or, in other words, there is not the demand at the price. During recent years we have seen the tendency on the part of labour (encouraged by idealists) to submit their requirements, both economic and social, as a first condition in the scheme of things, in the belief that these are the governing factors. The result we see to-day; the fallacy being responsible for prolonging the industrial depression from which we are all suffering. The cost of labour, i.e., cost of production, is clearly a governing factor in the price of the article, but it is equally true to say that it cannot ensure the demand if we are not in a position to pay the price. We proved during the war that we could exist without many things, or make them last longer, thus enabling the nation to concentrate upon war material. By doing without many things we paid a large amount of the cost of the war.

We have built up an amazing philosophy in recent years. We want to increase the happiness and prosperity of the poor, provide better housing, better schooling, better living, better health, more leisure, more freedom, more opportunities for enjoying the good things of this life. Enveloped in this atmosphere it is almost impossible for the individual to see the problem from a neutral and objective standpoint. Gradually he succumbs to verbiage, until in the end he can only listen to dialectical refinements about a truer freedom than being free. No one can deny that we have given this philosophy a fair test, even to the extent of bolstering it up by paying unemployment doles out of public funds. In the post-war deflation we see a general desire to make a stand at a level beyond the diminished purchasing power of the country, and when faced with the serious problem of unemployment we prefer to clamour for help from the Government, regardless of any principles upon which our whole industrial fabric is based. It is beginning to appear that there must be some serious flaw in our economic programme, and surely the time is ripe to study once again an old theory—that improved conditions or real wealth can only be measured in terms of production.

Any doctrine which enjoins the worker to contribute to lower prices is not fashionable, we admit, and at first sight it seems bitter medicine to offer when we sympathise with the worker in his discontent. The economist must, of necessity, seem hard and unsympathetic, but the sentimentalist, who is genuine but often mistaken, does not monopolise all the human qualities because his doctrines are popular. That Mr. Strachey had these ideas in his mind when he wrote his dedication we feel sure. In a world where values are comparative, we may some day find that the conditions prior to the war were not so bad as they appeared when the glittering future was dangled before us. It is true they were not so good but what they might have been better, but human progress and development did not end in 1914 because it was made to appear that it was a sudden discovery in 1918. Civilisation is all the while improving, and the whole difficulty to-day is not that we are reaching too far in our ideas, but that we are neither certain what we mean by better conditions, nor how they are to be obtained. In a letter in *The Times* of November 5, Lord Hugh Cecil deals with the problem of unemployment, and it is interesting to note that he confirms the general theory which we are discussing. The whole problem resolves itself into the question of how long we have to wait until these principles will be understood and accepted. In the meantime, we are doing everything we can to help the worker to prolong the depression. Salvation can only be found in a good will founded on common interest: in human relations between employers and employed; and in adopting an economic philosophy which is not based upon popular fallacies.

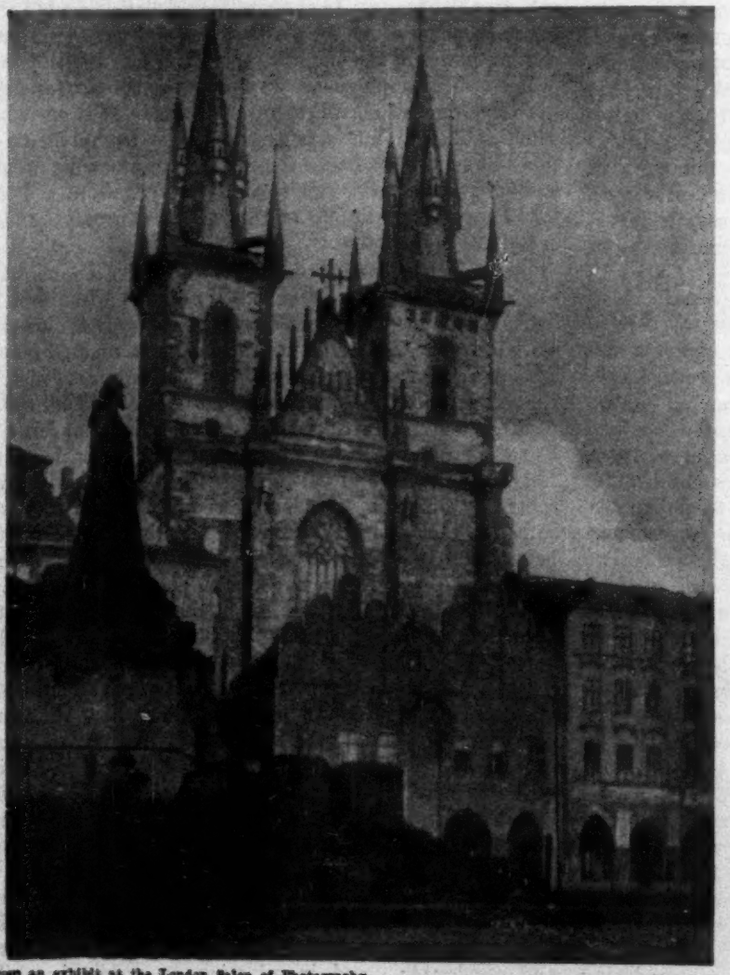
NOTES.

Proposed Exhibition of Architecture at Wembley.

WE refer elsewhere to a proposed exhibition of architecture at the Empire Exhibition. But we are told it is to be strictly limited as to space, and to be limited to photographs and models, and also to be limited to those who are invited. This three-fold limitation is the reverse of encouraging. At the Ghent Exhibition, shortly before the war, the galleries devoted to architecture would probably have held nearly all the Royal Academy pictures. The drawings were fully displayed and the whole effect was as pleasing and dignified as our usual architectural shows are dull, crowded and mean. Of course, only executed works will be shown at Wembley, and only such as come from architects whose work is appreciated by the selecting committee.

Advertisement for Architects.

AMONG the many things offered in the abundant fare of after-dinner speechifying, on the occasion of the fifth dinner of the Architecture Club, Lord Riddell volunteered some advice—more useful perhaps to architects than to architecture—to those who feel the need of other than the accustomed ways identified with the profession for getting hold of work. To some of us, none the less, this subjecting a noble art to the flacid interpretations of after-dinner oratory, with the idea of encouraging it, is a matter of some surprise. His lordship's proposal that the architect should sign his building is not amiss, and has some warrant in old tradition, though some of us more intimate with architecture can read the architect's signature all over the building. But this hardly meets the needs of a commercial age, and he makes the suggestion that architects should advertise themselves more freely in the editorial columns of the Press. A course of "window dressing for beginners" plus the publicity agent should suffice, and if architecture cannot speak for itself, let the publicity agent take its place. Or does architecture not need to be saved from such friends! Seriously, this is not to the point, and such proposals can come only from those who know little of the nature or the obligations of this great art. The astounding thing to us lies in the fact that a number of popular and distinguished persons should not see that architecture is very badly served by such friends, and that in lending themselves to this sort of publicity for architecture with the idea of aiding it they may be doing it very bad service.



From an exhibit at the London Salon of Photography.

The Fyn Kirk, Prague. From a Photograph by MR. J. MCKISSACK.

"Hideous" City Churches.

IF the interview with Lord Hugh Cecil was correctly reported in the *Evening Standard*, the opinions of that eminent layman must be profoundly disturbing to those concerned in the defence of the threatened City churches. "Some of the churches," he tells us, "are very beautiful, and ought not to be touched, but some are very ugly—frankly hideous." Now, reference to authority in all matters of art values is extremely difficult, but this calm utterance of *fiat lux* in face of an almost unanimous architectural judgment is "frankly, very hideous," and were it not for the strong influence exerted by Lord Hugh in ecclesiastical affairs would be too silly to bother about. But let there be no mistake, the attack that is coming is very real and admirably camouflaged. No one can deny the needs of Greater London, the poverty of the clergy, nor the responsibility of the community to do justice to both; but the policy of those representing the official Church attitude is not one to enlist the support of the sympathetic layman. It is at once material and yet sentimental. If the Church authorities were to come forward and say—"here are Church and national treasures, help us to defend them; we can't, alone," their case would be strong. Instead, what are we told?—they are not treasures; they can be moved somewhere else; perhaps they needn't all be destroyed—while the whole question is mixed up with ecclesiastical procedure, including the amazing suggestion that the four new rectors would (according to Lord Hugh) "be the best judges as to what would be done with the churches, and which of them were really superfluous and could be removed." Were it not for the very real danger, the scene this suggests would be fit copy for comic opera.

Over-Production and Unemployment.

MANY people have wondered how the science of economics earned its reputation for being the prosiest subject on earth, when its study ought to illuminate many of the most difficult problems of the day. One of the reasons put forward is that the attempt to interpret economics by making them fresh and lively for the benefit of common folk invariably ends in the arena of politics. Hence the theory that the science of economics is studiously avoided by politicians, on the principle that it is more essential to take sides in a cause than believe that the issue can be settled

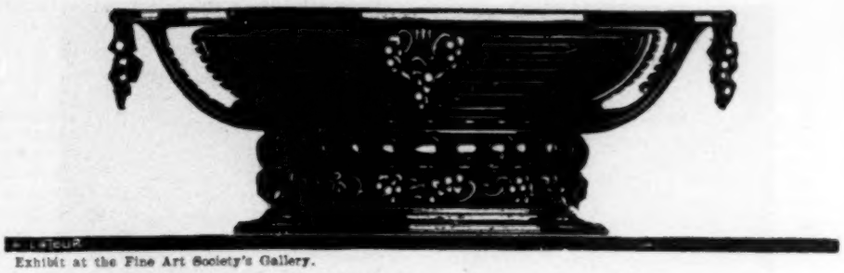


Exhibit at the Fine Art Society's Gallery.

Silver Bowl. By GEORG JENSEN. (*See p.* 895.)

mathematically. A classic example can be seen in the contention that over-production is responsible for unemployment. The fallacy comes naturally to the worker, who sees that a particular job would be divided among more workers if each man did less of it. Assuming we could prove the idea to be fantastic and absurd, the worker will not accept an argument which proves that low wages are better than total unemployment. There is a principle at stake, apparently, and there issues the countering argument that the lowering of wages may secure re-employment for the moment but it leads to a lower standard of life; unemployment in due time returns with undiminished severity, and so a population sinks deeper and deeper into poverty. Here are the arguments put crudely; and we can see that the issues are so wide and the battle ground so popular that the politician is loth to abandon a cause which he thinks cannot be settled by common sense. The comment that "you have a perfect right to be wrong" is little more than a felicitous epigram in political circles, but it may mean a great deal more in the economic world. In a world which is all too given to easy half-truths and popular insincerities, we need not lose our belief in human progress, though we may, with justice, be disbelievers in short cuts.

Architectural Annotations. IN his cosmopolitan volume of "Reminiscences," just issued by his old friend Mr. Macmillan, Dr. A. J. Sayce, Fellow of Queen's College, Oxford, sometime Professor of Assyriology in the University, records interesting particulars of his repeated explorations in Egypt and elsewhere among the ruined structures of very ancient origin, and particularly concerning his archæological survey with Mr. Somers Clarke (Surveyor, after Mr. Penrose, to St. Paul's Cathedral), at Meros, on the west bank of the Nile, from Wadi Halfa to Dongola. The architectural side of their programme was entrusted to Mr. Somers Clarke, who had sold his dahabia and built himself a winter residence within an easy ride of El-Kab, where Dr. Sayce had been his guest. They explored together the country between the First and Second Cataracts in 1893–4, when Mr. Somers Clarke measured plans of the local temples and other historic buildings on both banks of the Nubian Nile. The far-travelled author of this book entertains his readers with a very varied series of home notes and among these occur a few personal incidents about other architects known to him.

Ruskin, Butterfield, Scott and Burges. SIR HENRY ACLAND took a leading hand in founding the Museum of Oxford University during the fifties, built under the auspices of Professor Ruskin. Deane and Woodward, the famous architects, designed the buildings. The roofs were gay with purple and greyish-green slates symmetrically patterned and arranged, while the Bath stone mural treatment was relieved by marbles of various hues. Ruskin prevailed, but the result was much criticised as being alien to the traditions of Oxford. Strange to relate, notwithstanding this incongruity of style, Ruskin told Dr. Sayce that he could no longer take his usual walks past the Museum or enjoy his customary afternoon stroll in "the Parks," because William Butterfield's "streaky bacon" buildings for Keble College "made him feel sick." Keble's architecturally striking chapel, anyhow, made some amends for the deficiencies of the rest of its College buildings commenced in 1868. The late Dr. Creighton, Bishop of London, when he saw the interior of Keble College Chapel on its completion, remarked "Well, Butterfield has successfully solved the problem how to cover a wall with all the colours of the rainbow and yet leave it bare."

Building "Rings." THAT the natural effect of competition is towards establishing the real economic prices of a thing, and that in the free play of this force there is some security against the artificial use of prices through combinations, few will deny. When this factor of competition does not exist, as in the case of combines, we are dependent on one of two things to secure a fair price; either that the members of such combine are animated by so much public spirit that we can depend on them not to use the control in their hands against the public welfare, or that a Government Department, probably the Ministry of Health will intervene to control prices. The recently reported Exeter case (though as the builders say, there is nothing new in such an example) emphasises the fact that such combinations are by no means exceptional. "Rings to control prices" are not limited to builders. The Standing Committee appointed to investigate prices and trusts found that in connection with the building trade there were many associations in existence, and they thought that where 60 per cent. of an industry was controlled by associations steps should be taken to safeguard the interests of the nation. To take such steps is, however, very difficult. After all, it is a question of human nature. In the end it is in the slow emancipation of humanity to better objects, more essential values, that the remedy lies, and we must look to the forces of religion, education and citizenship to prevent humanity preying on itself.

From *The American Architect.*

Farm Cottage at Demarest, N.J. MR. F. J. FOSTER, Architect.

GENERAL NEWS.

Professional Announcement.

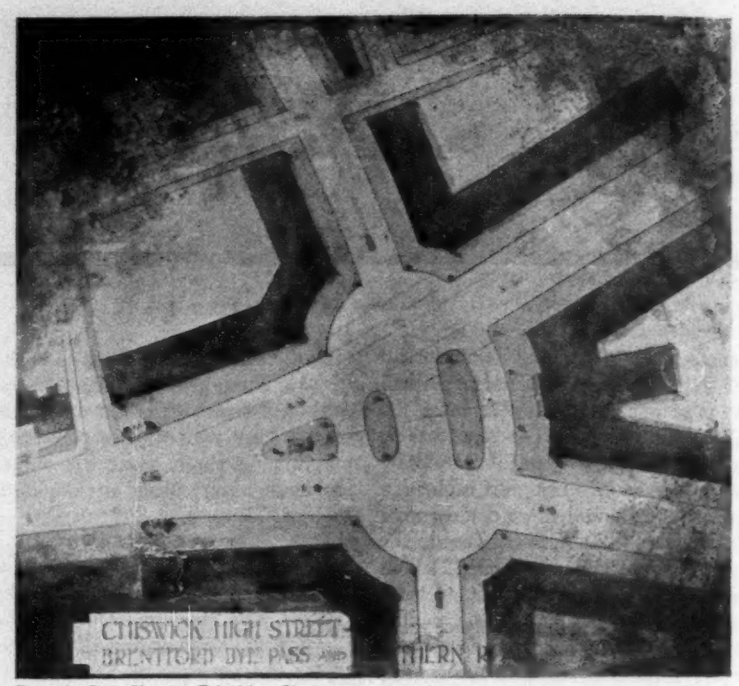
After Thursday, December 6, the address of Mr. Arthur Boxall, quantity surveyor, will be Lloyds Bank Chambers, 2, Henrietta-street, Covent Garden, W.C. 2. Telephone, Gerrard 8866.

Antique Furniture.

Mr. Mordaunt Rogers, F.S.I., F.A.I., gave his second and final lecture on this subject at the College of Estate Management last week. The lecturer traced the history of French furniture down to the time of the Revolution, which put an end to the age of furniture in that country. Mr. Rogers dwelt on the outstanding characteristics of the various periods of English furniture, and pointed out the way in which these were influenced at different periods from both France and Holland. The lecturer illustrated his remarks with a large number of lantern slides, which were kindly supplied by the authorities of the Victoria and Albert Museum.

Law of Property Act, 1922.

Mr. A. F. Topham, K.C., recently delivered the first of a series of three lectures on the above subject at the College of Estate Management. He said when the Act came into force so far as the general public was concerned, there would be very little difference to be seen. He traced the history of the attempt to simplify the transfer of land, starting from the Commission appointed in 1833 for this purpose. It had, he said, long been realised that it was impossible to simplify conveyancing until the law relating to land had been simplified. That had been done in the present Act by limiting the types of tenures; that was, by this Act, there were only to be two estates at law, the fee simple and the lease, all other estates and interests taking effect in equity only.

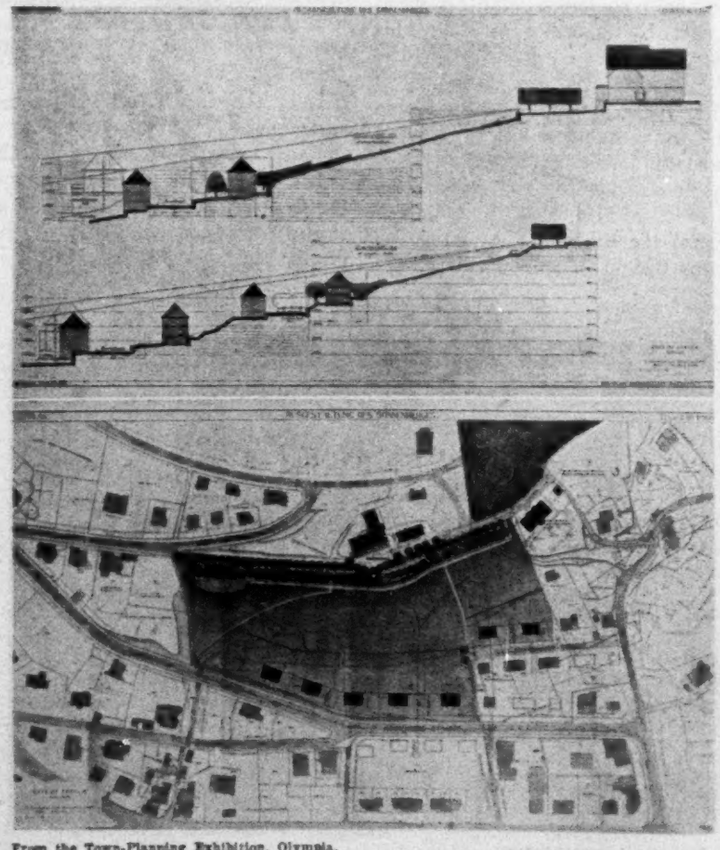


From the Town-Planning Exhibition, Olympia.

Great West Road: suggested junction with Chiswick High Road. (*See p.* 877.)

Mr. A. F. Topham, K.C., gave the second of the series of lectures on this subject at the College of Estate Management on Friday last week. The lecturer dealt with restrictive covenants and how these would be affected under the new Act, and pointed out that when restrictive covenants were created after the new Act came into force, they must be registered as land charges or they would not bind the purchaser, even if he had notice of them. He then outlined the arrangements for the construction of copyholds and the methods of dealing with the compensation arising therefrom. Entailed interests were next dealt with and also the position of mortgages under the new Act.

The final lecture will deal with the new rules of intestate succession.



From the Town-Planning Exhibition, Olympia.

Zurich: Preservation of view point and houses on sloping ground. (*See p.* 877.)

COMPETITION NEWS

New Headquarters for the Society of Friends.

In a limited competition Mr. Curtis Green, A.R.A., F.R.I.B.A., the assessor, has placed the design of Mr. Hubert W. Lidbetter, A.R.I.B.A., of Amberley House, Norfolk-street, Strand, W.C., first. The other competing architects were Mr. C. E. Elcock, F.R.I.B.A., Messrs. Fred Rowntree, F.R.I.B.A., & Son, Mr. Ralph Thorp (Messrs. Hornblower & Thorp), and Mr. William Allison, A.R.I.B.A. The site is situated at Endsleigh-gardens, and Euston-road, N.W.

Holmside.

FOR THE HOLMSIDE AND SOUTH MOOR COLLIERIES.—Designs for a cottage hospital. Sending-in day, December 7.

New Law Courts, Cairo.

The Competitions Committee of the R.I.B.A. are in negotiation with the promoters of this Competition in the hope of securing an amendment of the conditions.

Manchester Grammar School.

The President of the Royal Institute of British Architects has nominated Dr. Percy S. Worthington, F.R.I.B.A., as assessor in this competition.

Masonic Peace Memorial.

The Grand Lodge of England has decided to erect a masonic temple on the Great Queen-street, London, site, at a cost of about £1,000,000. The competition will be in two stages, an open competition from which six architects will be selected to take part in a final competition. Three assessors will be appointed.

Other Competitions.

For competitions open see our last issue.

FROZEN MUSIC.

BY MANNING ROBERTSON, A.R.I.B.A.

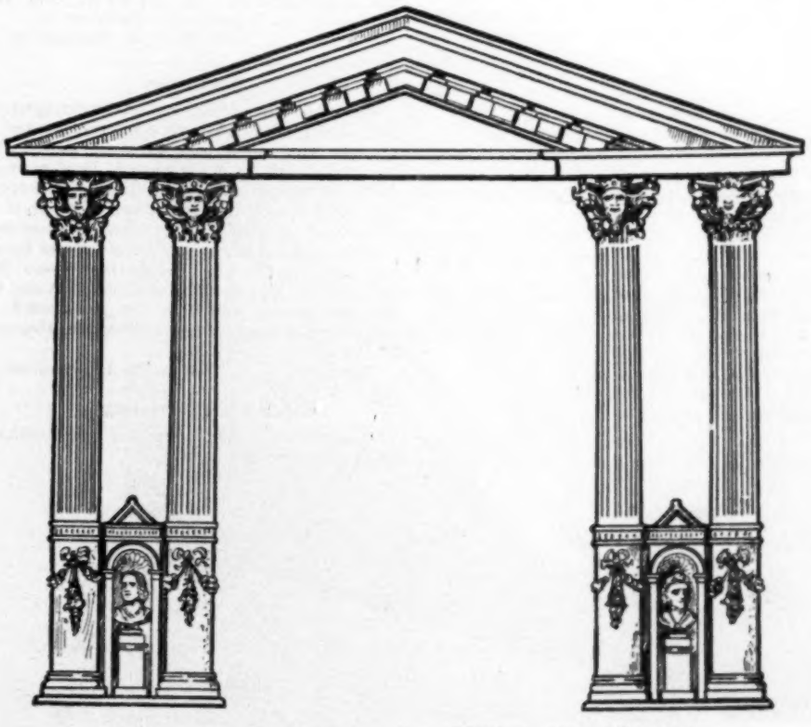
ARCHITECTURE has been called "frozen music," and most people will agree that constant repetition has invested the saying with some degree of authority. This being so, it is instructive to analyse the particular icicle which can be found on the programme cover of one of the greatest series of classical concerts to be found in the world. What kind of music is it that has been frozen into the solidity illustrated on this page? What can have been the origin of a composition such as this? Let us melt it down again into music and see what we get—a pseudo-classical composition, played without a conductor, by performers who have hardly seen their instruments before, some playing in C major, others in B minor, many of them reading their scores upside down. Such is the architecture, read in terms of music, that is set before the public to illustrate in architectural form the musical treat that is in store. Seeing that the music thus caricatured on the cover consists of some of the world's greatest masterpieces, splendidly performed, how can we account for this amazing discrepancy between cover and contents? If it is argued that the design on the outside means nothing it would clearly be better to leave the page plain.

For this pictorial blunder we must blame the solation surrounding the various arts; they tand out like islands, each with a self-contained ife, able with difficulty to discern the hazy outine of the others, but unwilling to admit that any of the others can exhibit more than a hazy shape even to its own inhabitants. One does not want to stress the shortcomings of this particular programme cover; indeed, to criticise it at all is like hitting a deformed baby; the utter absurdity of the design is in perfect keeping with the futility of every detail, without one single exception. The shafts, for example, are evidently square, and the designer, having observed that columns are often fluted, thought it would be a good idea to have flutes here. "How many?" he must have asked himself. His answer (whatever it was) to this question led him to compromise by putting ten on the extreme left, eight on the extreme right, eight on the inside left, and seven on the inside right. Again, take the little beetles, evidently of different ages and sexes, running up towards the flutes. There are eight of them under the ten flutes on the extreme left, six under the eight flutes on the extreme right, eight under the eight flutes on the inside left, and six under the seven flutes on the inside right. Could absolute originality be carried farther? Here there is no convention, neither one beetle per flute, nor even a fixed beetle-flute ratio.

As to the other details: the shafts rest on prodigious tins of Keating's, of different sizes, and we recognise old King Cole in the capitals that support a pediment which has not a fellow in the world. One wonders whether it ever occurs to those who draw such objects to go and look at a pediment, of which there are thousands in London; they would probably say that they had as much right to design a pediment as anyone else, and that if their's was unlike the others, so much the worse for the others. Admittedly the designer of this cover is entitled to do what he likes and as badly as he likes, in the way of drawing pediments, just as I may write down any arrangement of musical notes that may enter into my head; but herein lies the difference—I cannot make him and his abettors listen to my musical compositions (if I could they would hear, and hear often, such a symphony as would at least equal the pediment), but they can, in effect, make me look at their architecture; I, however, can only escape by staying away from the concert, or at least refraining from buying a programme and averting my eyes from that of my neighbour.

The principle of illustrating a piece of architecture on a musical programme, thus making one art assist the other, is excellent, and admittedly this design is in the nature of a compliment. Architecture is called upon to add dignity, and to assist in creating a receptive mood, instead of being, as usually happens, ignored altogether. Music complains of public ignorance and indifference; architecture does the same; and, since charity begins at home, one might hope that these two would at least sympathise with each other in their common distress; but of what use is it for good music to employ a travesty of debased architecture? Not only have those musicians in authority sanctioned this no doubt well-meant effort, but thousands of musicians have accepted it without a protest. If the musician employs this kind of symbolism to prepare his audience for the Choral Symphony, the architect might follow suit and help to instil a sense of mysticism and worship into a congregation by playing a defective comb in Westminster Abbey.

Probably the man who actually perpetrated this portal to harmony had no more knowledge of music than he had of pediments—he may have been merely a lost soul; but the misfortune is that the arts are so little interlinked that an architectural Caliban, which would be rejected by a pavement artist, is still allowed nightly to confront immense audiences as an example of "architecture." The architect's real grievance is not that his own sensitive eyes are outraged, but that at the very time when everything is being done to interest the public in architecture she should be betrayed by her twin sister.



Cover of a Programme of a Musical Entertainment.

THE GARDEN CITY.

THE following is a summary of the seventh of the series of lectures on Town Planning given by Mr. Wm. Haywood, F.R.I.B.A., at Birmingham University:—

Mr. Ebenezer Howard's conception of the modern garden city was in the same class of ideals as Plato's "Republic," St. Augustine's "City of God," More's "Utopia," and such projects for social reformation as those of Andreae and Swift in the seventeenth and eighteenth centuries; and Bellamy, Butler, Morris, and Buckingham in the nineteenth century. It differed from all these, however, in having surmounted the difficulties of practical demonstration; an achievement greatly aided by the pioneer work of Mr. George Cadbury at Bournville and of Lord Leverhulme at Port Sunlight—both of which communities were initiated about 1887–8. The first garden city of Letchworth was inaugurated in 1903.

The term "garden city" had been much misunderstood by the public, which appeared still to be unaware that towns like Letchworth and Welwyn—true "garden cities"—were self-contained and fully independent, standing upon land owned jointly by their citizens (or held in trust for purchase by them at their convenience); that these cities were artificially limited to an ultimate population of between 30,000 and 50,000 inhabitants, and that they were restricted in area by a permanent zone of open country, forming an agricultural belt for the health and mutual convenience of the grower and buyer of market produce. Therefore the term "garden city" stood for a policy rather than for a type of planning—a policy designed to oppose the evils of overcrowding, the exploitation of land values, and the growth of great cities, by substituting fully detached, self-supporting, and healthy communities as satellites of great towns, or as independent cities.

A "garden suburb," unlike a "garden city," was an integral part of a larger community, and, therefore, subject to control by those outside its boundaries. It was also more or less dependent on this larger community for certain social, educational, and occupative facilities; it might be simply a residential or dormitory area for the parent city, as in the case of Hampstead, London; or it might be practically self-supporting, as at Bournville, which, save in the matter of separate administration of the Letchworth type, approached the garden city condition very closely.

A resemblance between the two kinds of town growth described above, which was apt to mislead the public, was the method of planning for houses and roads which was common to both; this method was now common to all town-planning schemes. The special quality distinguishing true garden cities consisted in the adoption of Mr. Ebenezer Howard's policy of administration.

CORRESPONDENCE.

Cambridge Collegiate Buildings Competition.

SIR,—We should like the readers of your paper to understand that we are not in any way associated with Messrs. Holt & Rees, of London, who were competitors in the above.

We have never written to the Press to complain about the assessor's award in any competition we have entered, and we are entirely in sympathy with the opinion expressed in Professor Reilly's letter on this subject.

T. TALIESIN REES,
RICHARD HOLT.

Liverpool.

Charlatans and Pests.

SIR,—With reference to Mr. McArthur Butler's letter, I regret if I have done the Society of Architects an injustice by suggesting that it has done nothing towards securing the work of local authorities for members of the profession.

Mr. Butler states that local authorities were circularised twice. Why was this policy discontinued until the whole of the architectural work had been wrested from the hands of road and sewer men and placed in the hands of architects? Would the doctors of this country be content to rest on their oars if municipal medical work were in the hands of veterinary surgeons and chemists?

At the present time numbers of County and Borough Surveyors, City Engineers, &c., are responsible for the architectural work of education authorities, housing schemes, and numerous other building works. Is the Society content for this architectural work to be lost to the profession?

It may be argued that, when a town has to erect a large building, an architect is employed. In many cases this is so, and a qualified man—designated "temporary architectural assistant"—carries out the work. The surveyor's name appears on the drawings and in the Press reports, and the architect, unhonoured and unsung, receives a month's notice when the contract is completed. Is the Society satisfied that members shall act in this capacity for the benefit of local surveyors?

Again, the medical profession take strong action in any case where municipal posts are advertised at inadequate salaries. Does the Society attempt any action when architectural posts are offered at low rates of pay?

It might appear to the architect in private practice that this municipal work does not affect him. An official architect might appear to be as detrimental to his interests as a Borough Surveyor doing architectural work. I venture to state, however, that once local authorities are convinced that the best results are obtained by engaging architects to carry out their legitimate work, then private individuals will follow suit and a general increase in the number of clients consulting architects will take place.

Why is the architect debarred from competing with the surveyor on equal terms? A member of the Surveyors' Institution may practise as an auctioneer, estate agent and architect. He may also advertise. Is there some secret pact between the Institution and the Society whereby members of the latter are delivered into the hands of the former, bound hand and foot?

With Mr. Butler personally I have no quarrel. I have found him most willing to help members in every way possible, and realise that the present policy of the Society is not necessarily his own. I would ask him, however, to tell members what action (if any) the Society is taking to obtain the whole of the architectural work of the country for architects in general and members of the Society of Architects in particular? If no attempt is being made to do this, then, in my opinion, the Society fails in its duty to its members and cannot expect to hold its own with other professional bodies.

C. F. OVERY, M.S.A.

Housing and the Labour Party.

SIR,—I have read with care the article in your recent issue, wherein you castigate the policy of the political Labour Party in the matter of Housing. It is a debatable question whether it is the function of the professional and trade Press to deal with such matters from the political as opposed to the technical standpoint. As, however, the precedent has been set, and is being widely followed, perhaps you will, of your courtesy, allow me a little space for the expression of a contrary view.

So far as I can gather, the main objection you cherish to a State scheme as opposed to a private enterprise, is based upon the assumption that the former is necessarily wasteful as compared with the latter. We may agree that in the pre-war days it was possible for the private speculator to erect working-class houses and to let them at a figure at once within the means of the tenant, and yielding a reasonable return to himself. Be this as it may, the conditions to-day are, as you admit, entirely different, and in the opinion of many of us the National or State Scheme offers the only practical solution of a problem of terrible urgency.

You make much of the wastefulness of the war period, and argue on the assumption that similar wastefulness must be an inevitable condition of all public enterprise. May I, as an architect who has been a soldier, suggest that "blackmail" is a rather better word than "waste" in this connection? While a vast number of our men were risking their lives, health and worldly fortune, others in the security of the homeland availed themselves of an exceptional opportunity created by the state of war to feather their own nests. It is true, unfortunately, that the Governments of those days made many bad bargains to the disadvantage of the public purse, but, Sir, bargaining takes time, and, with lives in the balance, certain persons were able to demand and receive payments for their supplies which bore no just proportion to real value, and which, as compared with the fighting man's pittance, amounted to a gross scandal. Do you really think that a Labour Government would permit these persons and others of their ilk to repeat their performance in times of peace? You refer to the Addison scheme, which, although damning it with faint praise, you admit to have set a high standard. You are greatly upset on account of the ever-expanding cost of such schemes, but you do not explain the causes of such expansion. Well, Dr. Addison has been thinking; he has realised the cause of the increasing cost, and has been led to feel like many another man of education and vision, that the Labour Party's policy is the right one, and has associated himself therewith.

I suggest, Sir, that it is high time the nation realised that the men who most need the houses, and the work of building them, are for the greater part those who in the dark days gave themselves in service to her. To-day it is up to England to honour herself by making some real attempt, as a nation, to redeem her many promises.

Money is short, we know, but a debt of honour is a first charge. This is not primarily a matter of £ s. d.; it is, or should be, a first charge upon our corporate conscience.

Surely England has a soul.

F. R. I. B. A.

London.

[**** Our article dealt entirely with the manifesto of the *Independent* Labour Party, which is quite distinct from the Labour Party proper, and it was not intended as a castigation of that or any party. We deprecated, moreover, taking political sides, and said that all men of good will should do their best to help in the success in any scheme that for the time being was the policy of the Government in power. In speaking of waste at the Ministry of Munitions, we were not so much referring to dishonesty or to bad bargains, but to the "red tape," or, in more polite language, "procedure" which seems to be necessary in a Government department.—ED.]

Standard Method of Measurement.

SIR,—In reference to the letter of "Quantities" on page 831 of *The Builder*, may I point out that the dimensions as given apply only to "granite"; if for any other stone, the beds and joints should be measured as "*half* beds or joints," if booked as the example.

Guildford. WILFRID L. EVERSHED.

Architecture and Ancillary Arts.

SIR,—Please grant me space to say, with reference to the resolution passed unanimously by the late Council of the R.I.B.A. that the Institute, in principle, should hold an annual exhibition of arts ancillary to architecture, that it is noticed that nothing has yet been actually done.

What is asked of the powers that now be is reasonably prompt performance. The question at issue is a plain one: Is the profession to give official encouragement and support to fine workmanship and thereby fulfil the terms of its Royal Charter and render a national service, or is it not? Upon their decision and energetic action on so vital a matter will be revealed whether the Council now ruling is a supporter of architecture proper or its mask.

It is quite unnecessary to appoint further committees and sub-committees, which will only confuse the simple issue and give endless opportunities for quibbling and hole-picking. They have a very simple scheme before them, involving—according to careful calculations—less expenditure per annum than a very junior clerk.

We await a definite pronouncement with the usual respectful patience, but with the reminder that this is a very serious matter and one which will be pursued with determination. Both the public and the public press are already aware of the importance of this movement, and are looking to the Institute for guidance.

W. W. SCOTT-MONCRIEFF.

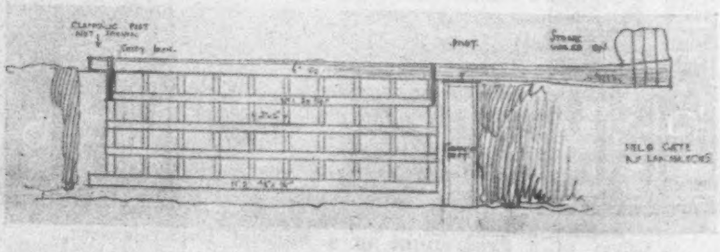
Field Gates.

SIR,—The recent letters and illustrations in *The Builder* have been very interesting, and I thought you might care to make use of the enclosed drawing I made when at Landrecies in 1918. It was measured and drawn on the spot, and is different in some respects from that mentioned by your correspondents; here you will see that the lattice portion is secured by an iron strap to the top. In the case I saw the gate opened into the field and the butt end of the tree swung out over the greensward, a clapping post stopping and securing the other end of the gate.

Norwich. STANLEY J. WEARING.

Architects and Advertising.

A letter on "Architects and Advertising" is given on p. 889.



THE TOWN-PLANNING EXHIBITION AT OLYMPIA.

BY W. R. DAVIDGE.

OLYMPIA is a place of vast spaces and especially so now that the new additions to the building have been completed. The whole of the gallery of the new portion was given up to the Town-Planning Exhibition, but, even so, it was not easy to find one's way to one or the other of the stairs giving access to the galleries where the Exhibition was on view. Once there, though, it was evident that the pilgrimage was well worth while. The Exhibition was certainly one of the best got together in recent years, and the material collected was for the most part of essentially practical character, though one missed, perhaps, the huge pictorial cartoons which were such a feature of the first Town-Planning Exhibition on the walls of the Royal Academy in 1910. Much practical work, and good work, has been done in the last thirteen years in the direction of town planning. Arterial roads and road widenings have gone ahead all over the country. Practical object lessons abound everywhere, so perhaps there is less need to appeal to the poster artist than formerly. The combination of colour and form in the presentation of large maps and diagrams is still a subject better understood on the Continent and the United States than it is in this country. The practical work, though, which has been done and is being done in the matter of town planning the world over speaks for itself, and the Exhibition at Olympia was but another proof that a world-wide movement of this magnitude gathers momentum as it goes.

Town planning, after all, is essentially a common-sense problem and the problem of good roads is essentially a branch of town planning. Hence, one can well understand how such an important body as the Commercial Motor Manufacturers came to give up so large an area of its Exhibition to the subject of town planning. The arrangement of this section of the Exhibition was in the capable hands of Major Hardy Syms, F.S.I., and his committee, and he was no doubt largely influenced in his scheme of arrangement by the interesting Town-Planning Exhibition which took place in Manchester last year. The great difference, though, between the two exhibitions was that at Manchester entry was free to all the citizens, young and old, who thronged the Town Hall daily; while at Olympia, from the nature of things, entrance was by ticket only and very largely confined to the invited few, though there was a large sprinkling of municipal engineers and others whose work brings them into touch with the problem of town planning. The *pièce de résistance* of the whole Exhibition was undoubtedly the great floor model, prepared by Professor Adshead and his students, showing one-eleventh full size the Brentford By-pass Road (the Great West Road). The professional model-makers will have to look to their laurels.

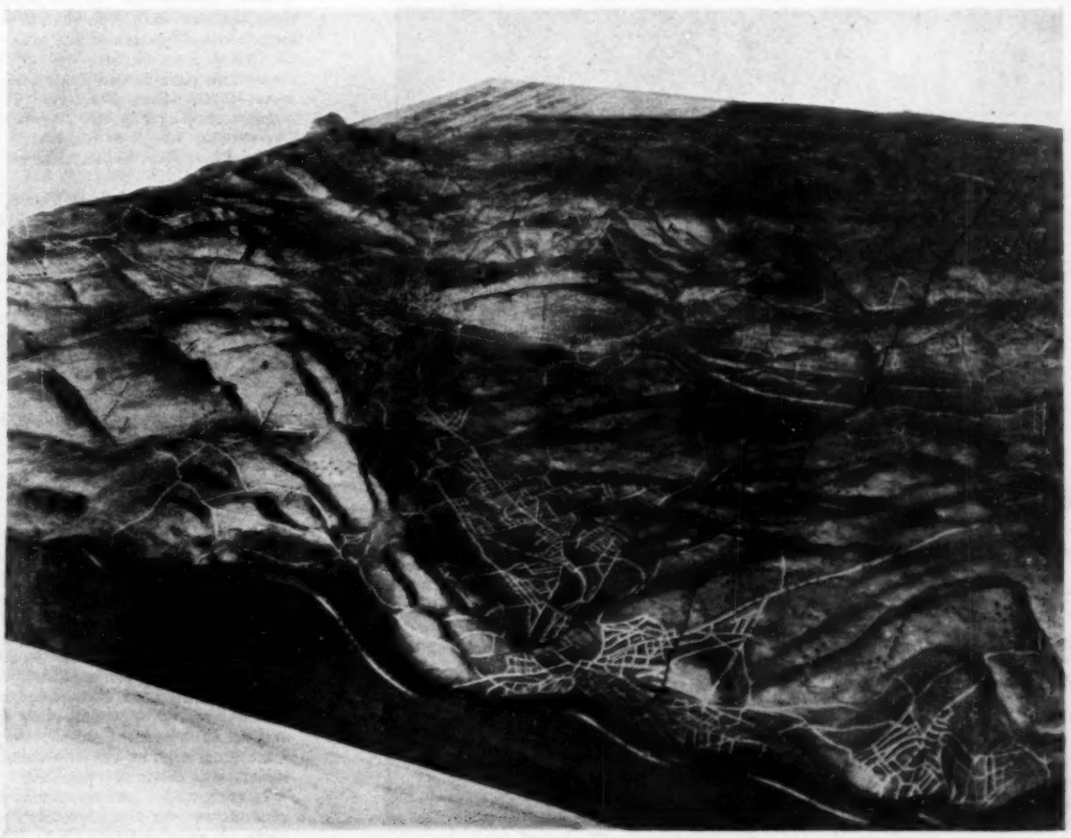
In the section dealing with civic survey as a preliminary to town planning proper, the value of aeroplane photographs is becoming clearly apparent and the time is undoubtedly approaching when every town will possess its periodical photographic record, showing pictorially and graphically the development of the city. Civic survey diagrams will be even more attractive than they are when they appear as actual photographic records of the town itself. The diagrams of New York, showing the density of population at various dates, proved the steady outward trend of industrial and commercial development, pushing out before it, like a glacier with its moraines, the congested areas where the poorer workers live. The city of Bradford had a fine series of maps showing present conditions and the way in which improvements are being steadily effected, despite difficult conditions as to topography and overcrowded humanity. The interesting little survey of Newbury went back to the beginning of things, and it is well in all towns to realise the reasons which brought the town at first to its present locality, and secondly, the reasons which have kept it there and are keeping it going to-day.

Mr. Pepler's interesting diagram showing the extent of town-planning schemes and regional-planning schemes all over the country showed what widely varied towns and regions are at present hard at work on town planning all over the country, and lends point to the recent suggestion of the R.I.B.A. to all its members that architects, of all people, should be taking a hand in this great movement which is going on everywhere. The diagrams showing the system of notation adopted by the Ministry of Health will help to standardise the colours and method of presentation of plans for the approval of the Ministry, but if insisted on too closely may eventually be found to stereotype the planning as well as the plans.

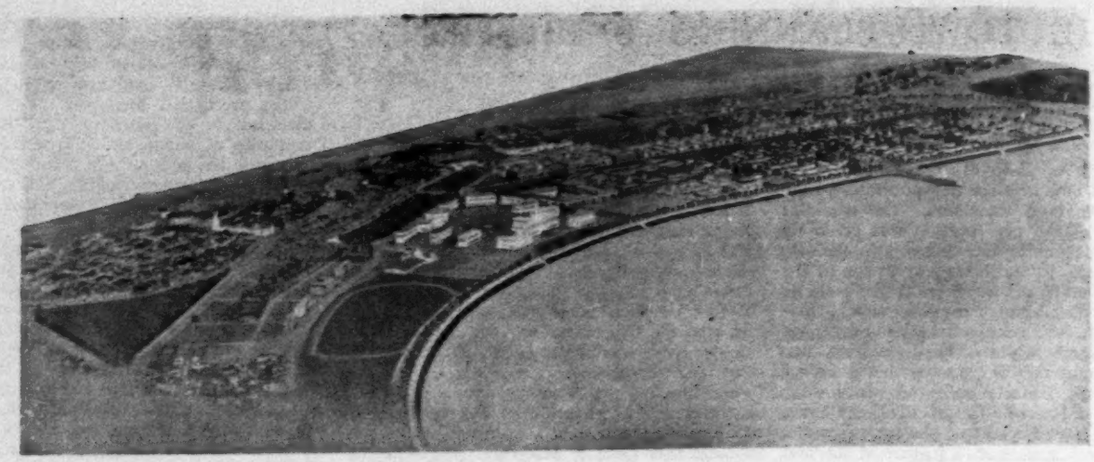
Birmingham and Manchester both prepared a useful series of maps showing the present utilisation of the surface in the neighbourhood of the city, and Cardiff made use of aerial photographs to very good purpose.

Even distant Lucknow made use of the aerial survey to indicate the comparative densities, and here we had an example, rare in Western lands, of a large city partly fallen into decay, largely through the loss of its position after the Mutiny as the capital of the kingdom of Oudh. Of foreign cities Vienna and Paris showed interesting examples of civic survey work. In the illustrations of schemes under the Town-Planning Acts, ranging from Leicester to Glasgow, there were many points worthy of note, though the Ordnance Sheet itself did not convey all the facts to the eye of the passer-by.

The Southgate Town-Planning Scheme was



Rotherham Region: Portion of Contour Model.



Bombay : Model of Back Bay Reclamations.

particularly interesting as an example of suburban development, in which the most was made of parks and open spaces. A contour model, however, even to the technical eye, is a very great help to a rapid grasp of the three dimensions that actually have to be dealt with on the site. The model prepared for the Rotherham Regional Planning Committee, of which an illustration is given, proved particularly useful in solving many of the problems, and such a model amply justifies the moderate outlay involved. The foreign examples from the larger cities of the Continent were one and all prepared in the pictorial style and excellently presented, the outstanding examples being those exhibited by the cities of Zurich, Breslau and Stockholm, and the Dutch city of Ysselmonde.

In all these, the massing of the colours on the town and its surrounding park lands resulted in a most pleasing result. The large scale model of Gothenburg, Sweden, showed what could be done with the assistance of a plaster model in aiding the eye to take in difficult topographical problems. The blue water and the brown roofs formed a fascinating *coup d'œil* of the city of Gothenburg.

Professor Adshead's plan for Plymouth was also a good example of colour, the blue of the sea being reminiscent of the old maps on the walls of the Vatican. Mr. Barry Parker's model of Oporto, too, was an example of what a model should be.

In Eastern cities the plans of Jerusalem and Alexandria showed that the modern wave of city improvement had reached even these ancient cities, and both of these were striving to emulate the Western cities in foresight for the future.

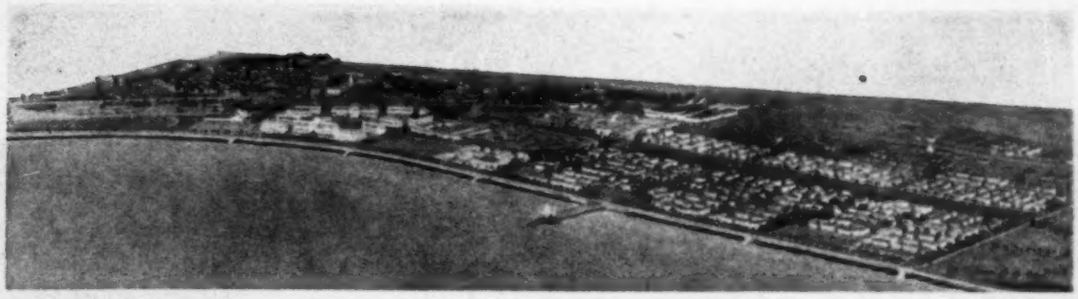
There are cases where one feels that the very stones of these old cities are too precious to be touched, and in the case of Jerusalem, at any rate, we may well hope that it will be many a long year before such sacred spots as the Mount of Olives are touched by the town planner. Of modern cities in the East, none is developing more rapidly than Bombay. The great work being carried out by the Bombay Development Department was well illustrated by the model of the Back Bay reclamation works at present in progress.

Under the head of Road Forms, cross sections of new streets showed what Manchester and Birmingham, Leeds and Glasgow were doing, and in this section, too, the Ministry of Transport showed in the London and Southend road what great advantage an aeroplane survey can give in expeditious working. In this case, by the aid of aerial photographs, a great scheme of relief work was put in hand weeks, if not months, before it could have been ready by any other means.

The parking of motor cars in public streets and garages in all our great cities is a subject which will require a great deal of thought and attention, and the students, both of the A.A. and the London University Atelier, are to be congratulated on the way in which they have tackled this new problem. The schools have been in friendly rivalry in suggesting the lines on which wholesale accommodation can be provided for the thousands of motors which are coming and are now almost on top of us. The cars swing into the huge garage, unload at the waiting platform, and then proceed to park diagonally within easy call when required. Several of the schemes illustrated showed great skill in the planning and arrangement of these huge garages, and the sketch elevations showed that even here something new in the elevations of our town streets was distinctly possible.

If ever, and whenever, aerial traffic becomes general we shall completely revise all our ideas of what a town ought to be. Within the lifetime of the present generation there will inevitably be vast changes.

Sketch showing necessity for preservation of trees on Arterial Roads.
By MR. ERNEST HERBERT.



Bombay—Portion of Model.

With such a prospect, the preservation of the City churches and their spires takes on an even more imperative aspect.

Petrol filling stations are becoming a wayside object along the outlets from most of our large towns, and it is to the credit of the various oil companies that these are in many cases very pleasing both in their design and layout. With all these changes in our towns and in our countrysides the necessity for rigidly excluding unnecessary advertisements and at the same time preserving our beautiful country lanes and trees is daily more apparent A very telling sketch by Mr. Herbert showed the wayside clump of trees, and what only too often happens to it when the new arterial road comes along. The remedy, though, is clear, and it cannot be too strongly emphasised that trees once cut down cannot be replaced in the lifetime of this generation.

We have even now at least one Committee hard at work for the preservation of wayside greens and trees along such roads as the Brighton-road, and tree conservation is indeed a national service in more ways than one.

The work of the London Society was well illustrated at Olympia by a fine series of maps; probably the most interesting and of most topical interest being the zoning maps of the various Metropolitan boroughs, showing the location of the industries and residential quarters. From these maps, one fact that emerged most strongly was the enormous number and area of land occupied by public institutions in our slum districts. It looked from these maps quite clear that it would be cheaper to the community, as a whole, to have more open space for everybody, provide plenty of fresh air for healthy life and prevention of disease and crime, and avoid the necessity for curative institutions and asylums of every description.

Mr. Herbert's ingenious model of Charing Cross Bridge has already been illustrated, and the scheme is one which, in the light of events, was bound to take even more definite shape in the near future.

Under the section dealing with City development, a number of Scandinavian towns, particularly in Sweden, showed what could be done with an enlightened public authority. Housing schemes were illustrated by the L.C.C. estates at Becontree and Bellingham and elsewhere, as well as a number of provincial housing schemes.

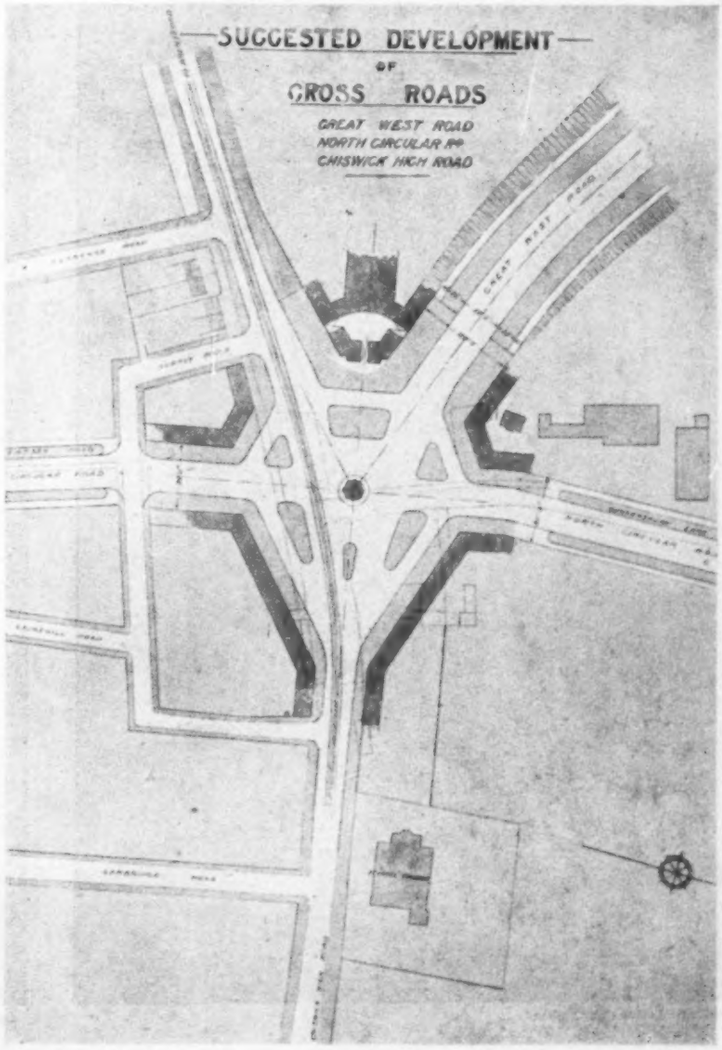
Mr. Alwyn Lloyd's picturesque housing schemes in South Wales were among the most interesting of those exhibited. The Garden Cities and Town-Planning Association also had an interesting series of plans, showing the progress of the garden city idea, or rather of the new self-contained towns as opposed to the idea of extending our overgrown existing towns.

A few American city plans were given, Philadelphia being a typical example. Wherever the chessboard plan has been adopted, almost the entire effort of all subsequent town-planners has perforce to be directed to the provision of one or more diagonal roads or avenues, and when one appreciates the cost of such a clearance as that involved in the construction of the Fairmount Parkway, in Philadelphia, one realises that one such "improvement" is about as much as one generation can stand. The checker-board plan is all right for the first small area, but when the city gets above a certain size, it costs in hard cash a good deal more than it is worth. Interesting French examples of town planning were shown from Belfort and St. Raphael, as well as the extension of the city of Paris and the reconstruction of Reims; but one may well quibble at the arrangement of an exhibition that puts under the head of *La Renaissance des Cités*, such diverse subjects as Birmingham—scheme for congested area; and Bath—aerial photograph of Royal-crescent.

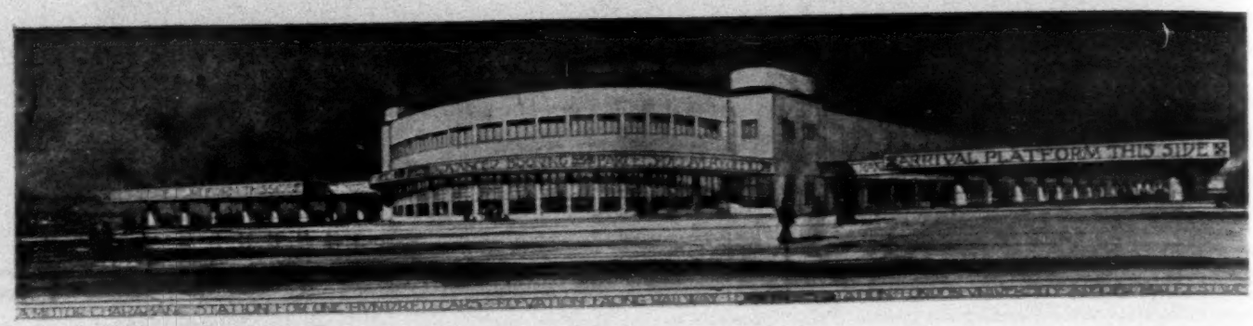
Mr. Mawson exhibited a number of magnificently produced plans, one of the most attractive being his plan and perspective of the suggested developments for Blackpool, as well as a large number of parks and playgrounds.

Mr. Jas. Thomson's plans for Dundee, too, were examples of what an enlightened city can do under efficient leadership.

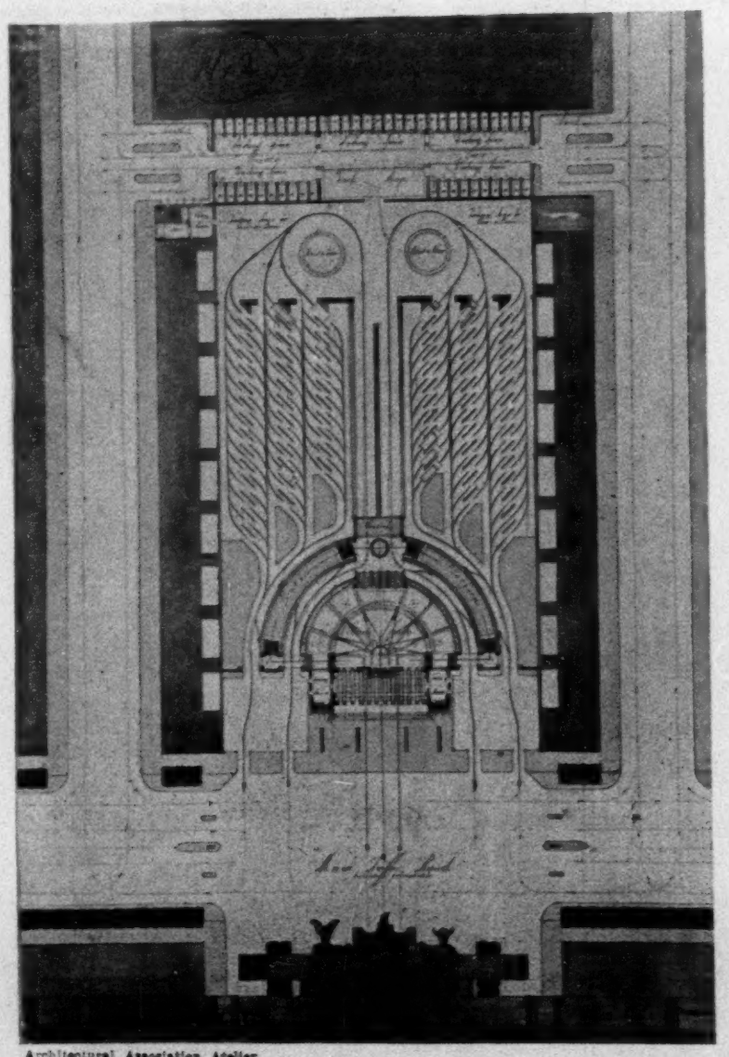
A number of regional planning schemes were shown, and it is satisfactory to note that at present there are no less than eighteen of these regional committees at work in various parts of the country. If they are to do real work, though, it will be necessary to see that they are put upon a statutory basis and not left merely as advisory bodies to their constituent councils. Power to act and act promptly in the public interest is essential, and it is not too much to say that the whole development of the country in the next twenty years or so will depend upon the boldness of the conception of our present regional and town planners.



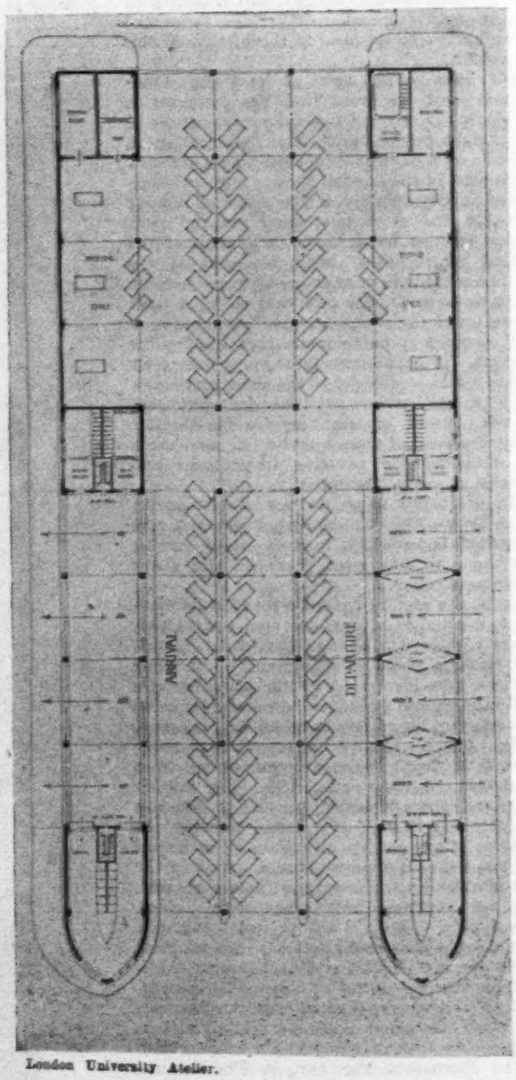
Great West Road—Suggestion for Junction with Chiswick High Road.



London University Atelier.



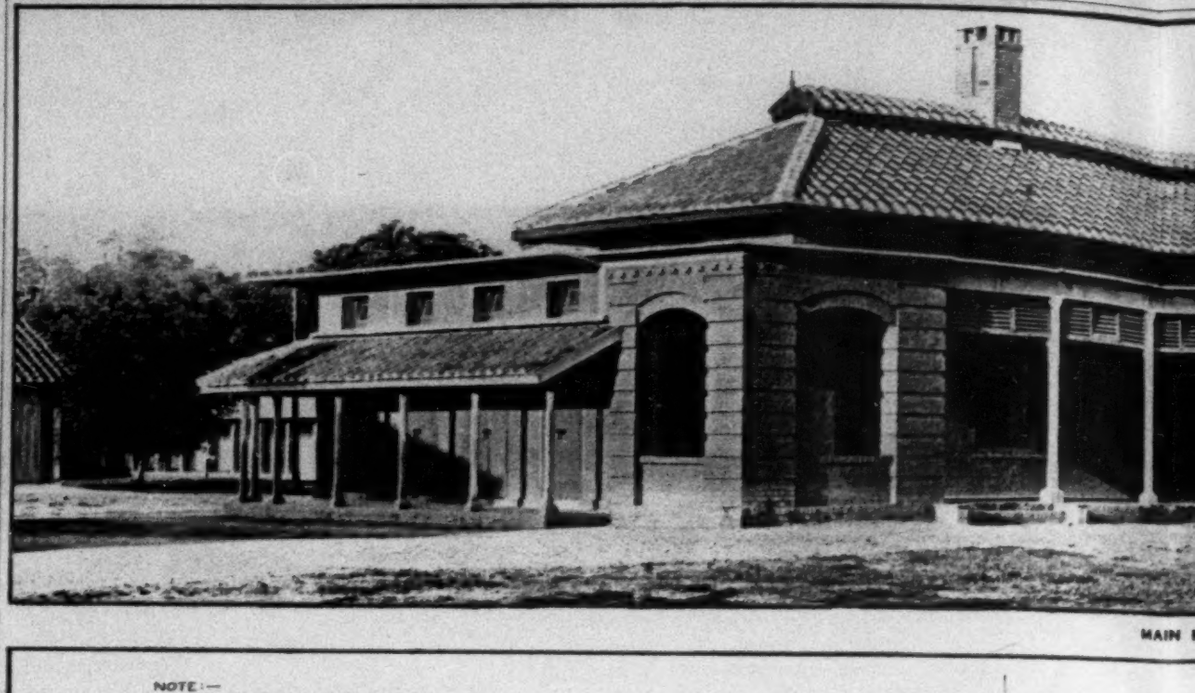
Architectural Association Atelier.



London University Atelier.

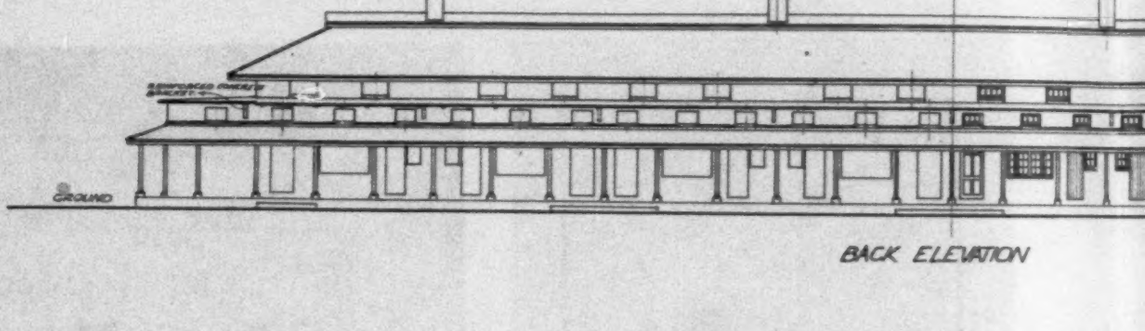
Designs for a Motor-Car or Char-a-Banc Depot for a Large Town.

From the Town Planning Exhibition at Olympia (*See p.* 877.)

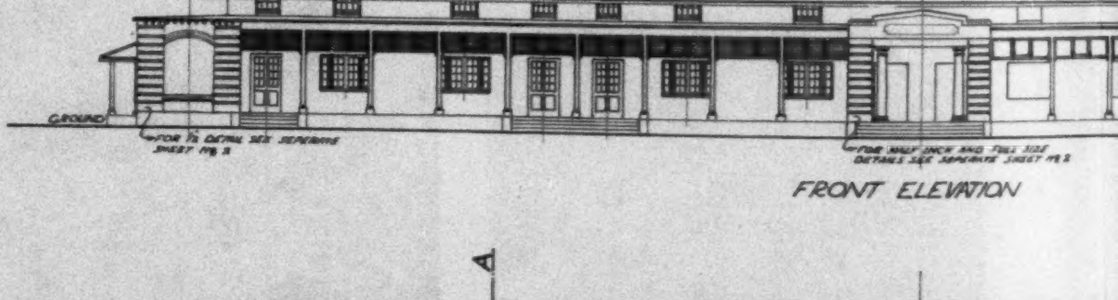


MAIN

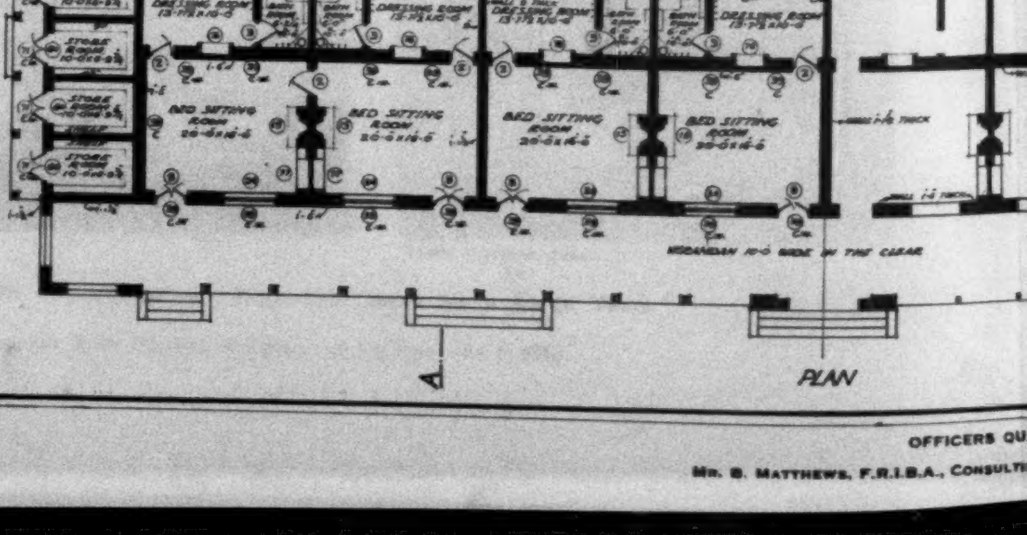
NOTE:—
FOR HALF INCH DETAILS OF THE
CHIMNEYS SEE SEPARATE SHEET No 2.



BACK ELEVATION



FRONT ELEVATION



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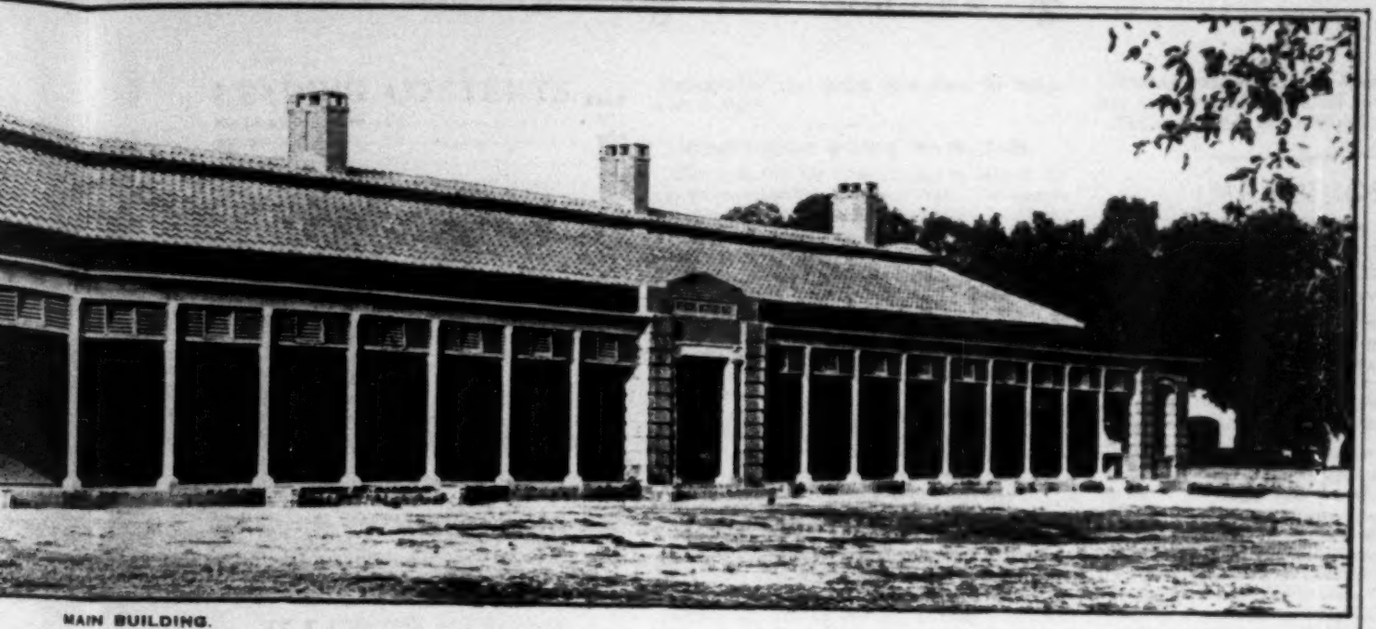
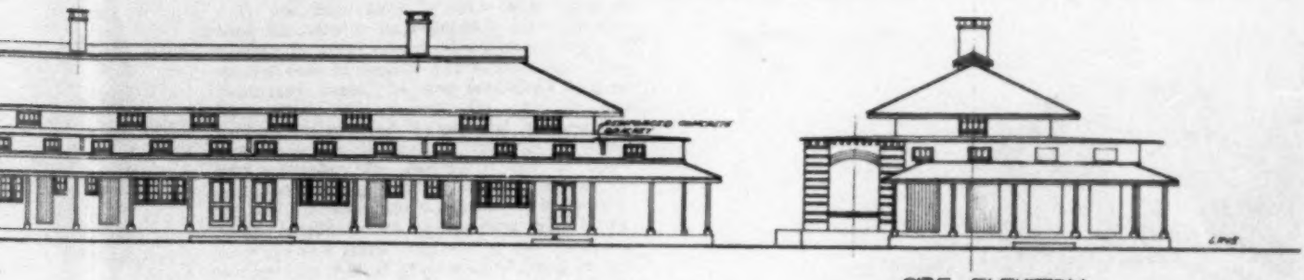
OFFICERS QU

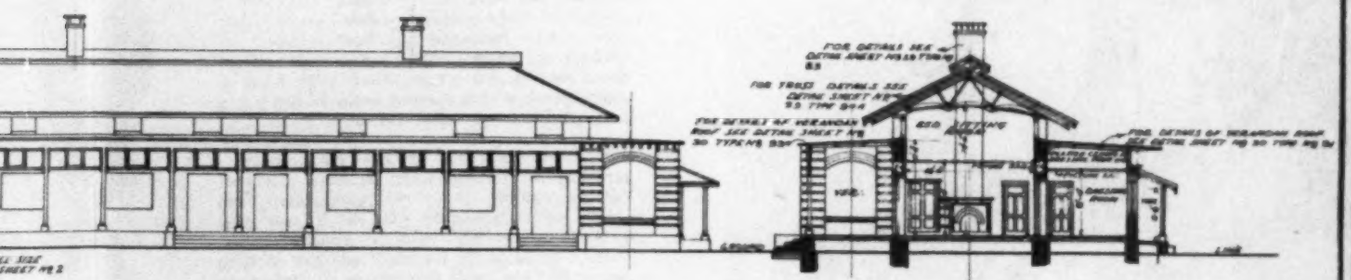
MR. B. MATTHEWS, F.R.I.B.A., CONSULTI



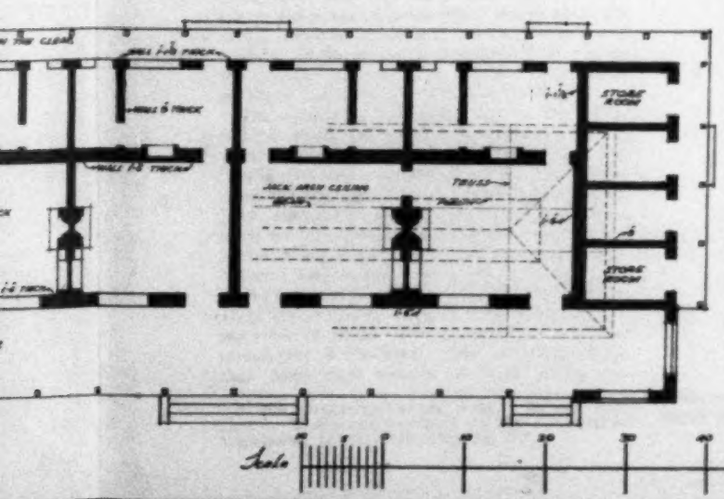
MAIN BUILDING.



SIDE ELEVATION



SECTION A.A.



NOTES.

1. FOR DOORS	TYPES	NOS	S.W.S	SEE DETAIL	SHEET	NO.
2. "	"	"	9	"	"	" 8
3. "	"	"	60	"	"	" 21
4. "	"	"	83	"	"	" 27
5. " WINDOW	"	"	84	"	"	" 7
6. " CLEAR STORY WINDOW			93	"	"	" 13
7. " "	"	"	71	"	"	" 23
8. " CUPBOARD	TYPES	NOS	74&77	"	"	" 28
9. " FIREPLACES	"	"	15	"	"	" 4
10. " CHIMNEY STACK	"	"	83	"	"	" 28

11. = REINFORCED CONCRETE VERANDAH TYPES NOS 1&2A SEE DETAIL SHEET NO. 9a

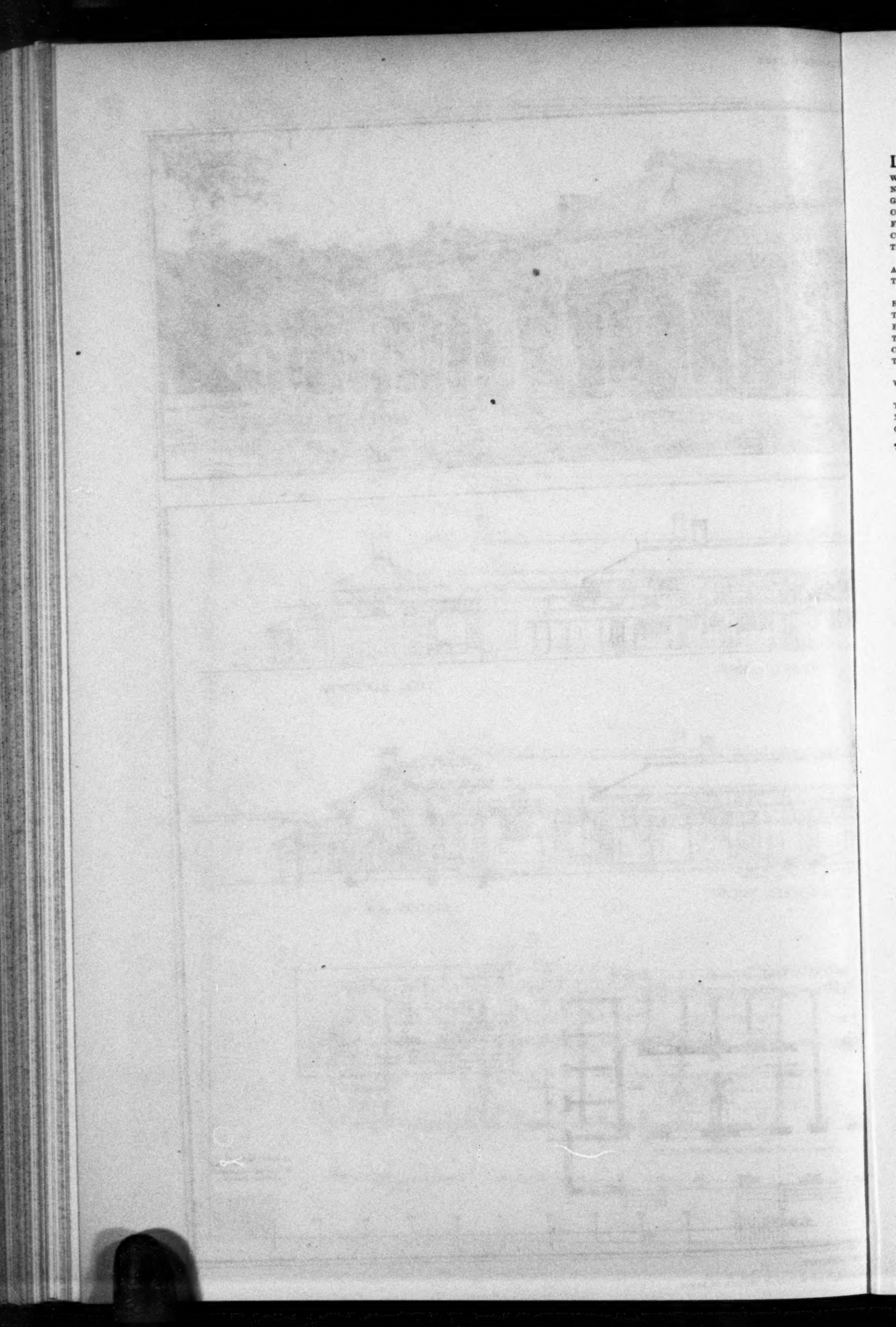
12. FOR ROOF TRUSS TYPE NO 3&4 SEE DETAIL SHEET NO. 39

13 WINDOW TYPE NO 24 TO OPEN OUTWARDS (FOR DRESSING ROOMS ONLY)

B. MATTHEWS, F.R.I.B.A.
CONSULTING ARCHITECT
MILITARY WORKS

FFICERS QUARTERS, MEERUT.

A., CONSULTING ARCHITECT OF MILITARY WORKS IN INDIA.



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ILLUSTRATIONS.

Architectural Sketches.

It has from time to time been assumed that the camera is responsible for a general decline in architectural draughtsmanship; a decline both in quality and in quantity. And there may, indeed, be some ground for such an assumption. The camera, for example, has well-nigh supplanted the pen and the pencil as a medium for illustrating buildings in books and journals. The camera is one of those appliances which, like the railway, the motor-car, the aeroplane, the telephone, or the broadcaster, lengthens life by enabling more to be achieved in a given time, and as we, therefore, cannot neglect it, it behoves us to use it to the best advantage; but however employed, it cannot wholly supplant the practise of architectural draughtsmanship except to the ultimate detriment of architecture.

First, the camera cannot give that accurate record of an existing building which is only to be obtained from the measured record, and, second, the camera cannot enable the student to *learn* great buildings, for this process needs prolonged personal contact and contemplation, such as is obtained only by sketching and measuring.

To those who imagine that there is a decline in the quality of contemporary architectural draughtsmanship, we would recommend the first part of the new volume of "The Architectural Sketch Book."* We are particularly glad to see the inclusion of so many Gothic examples. It shows that there are still young men who rise superior to any prevailing fashion to despise what is perhaps the grandest mode of vernacular building; it shows, too, that study and intimacy with the building is considered of greater importance than the production of drawings for, time for time and labour for labour, a great many sheets of classic detail could be exchanged for the one beautiful drawing of the screen at Southwold Church, by Mr. Philip Hepworth, or for the three sheets of Elgin Cathedral, by Mr. Gordon Holt.

The number of contributors to the sketch book is small, and most of the drawings are the work of three or four men. Considering that this is the first appearance of the publication since the war, the choice of material must have been unusually great; it would, therefore, seem to be unfortunate that the collection of plates is not more representative of the Architectural Association. Geographically there is a wide range covering England, Scotland, France, Italy and Belgium. Let us hope that a greater selection of names will appear in the second instalment of the book, while still maintaining that same high quality of work which has distinguished the sketch book since its inception in 1867.

*"The Architectural Sketch Book." Volume 1923, Part I. Edited and published by the Architectural Association, 34–35, Bedford-square, W.C.1.

British Officers' Quarters, Meerut, India.

This building has been erected in Meerut for the accommodation of single officers. The scheme consists of two blocks of single-story buildings similar to the illustration; each block provides eight quarters, comprising bed-sitting-room, dressing-room, and bathrooms, with small stores for each quarter in the end verandah.

The total cost of the two blocks amounted to Rs. 189,351 (£12,623). It was found that the cost of the building was reduced by constructing two single-story blocks, instead of one double-story block.

The design for the building was prepared by Mr. B. Matthews, F.R.I.B.A., Consulting Architect for Military Works in India.

Officers' Hostel, Lahore, India.

This hostel has recently been erected for the accommodation of British officers and their families stationed at Lahore. It comprises thirty-two unit suites of rooms each containing bedroom, dressing room and bath room. The quarters are built in two double-story blocks on each side of the public rooms as shown on the block plan. The walls are constructed of brick, which is plastered externally on the first floor. The main and verandah roofs are covered with Allahabad pattern tiling. Electric lights and fans have been fitted in all rooms.

The architect is Mr. B. Matthews, F.R.I.B.A.

MEETINGS.

TUESDAY, *December* 11.

British Society of Master Glass-Painters.—Dr. M. R. James on "Eton Wall Paintings." At the Victoria and Albert Museum. 3.30 p.m.

WEDNESDAY, *December* 12.

L.C.C. Central School of Arts and Crafts.—Sir Banister Fletcher on "Origin and Evolution of the Corinthian Order: Examples." 6 p.m.

Royal Society of Arts.—Sir Frank Baines on "Preservation of Historic Buildings." 8 p.m.

THURSDAY, *December* 13.

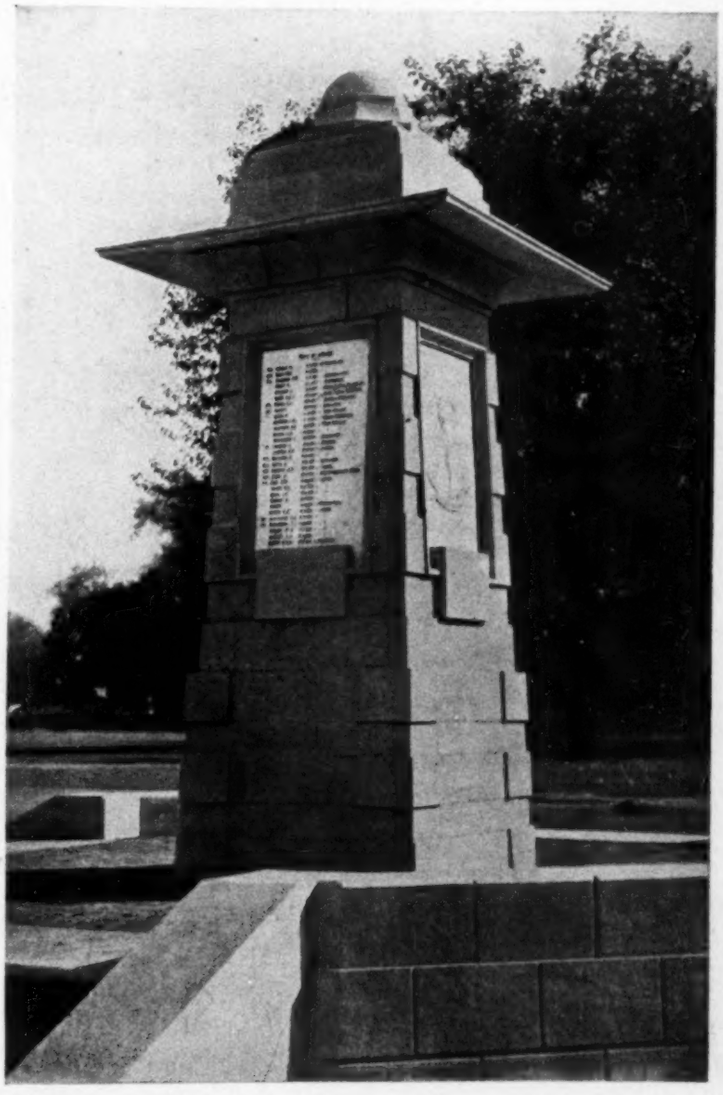
London Master Builders' Association.—Annual Dinner. At Hotel Victoria, W.C. 6.30 p.m.

Architectural Association.—Conversazione. At 34, Bedford-square, W.C. 1. 8 p.m.

Edinburgh Architectural Association.—Mr. J. Purves on "Arnolfo di Cambio and the Earlier (pre-Renaissance) Architecture." 8 p.m.

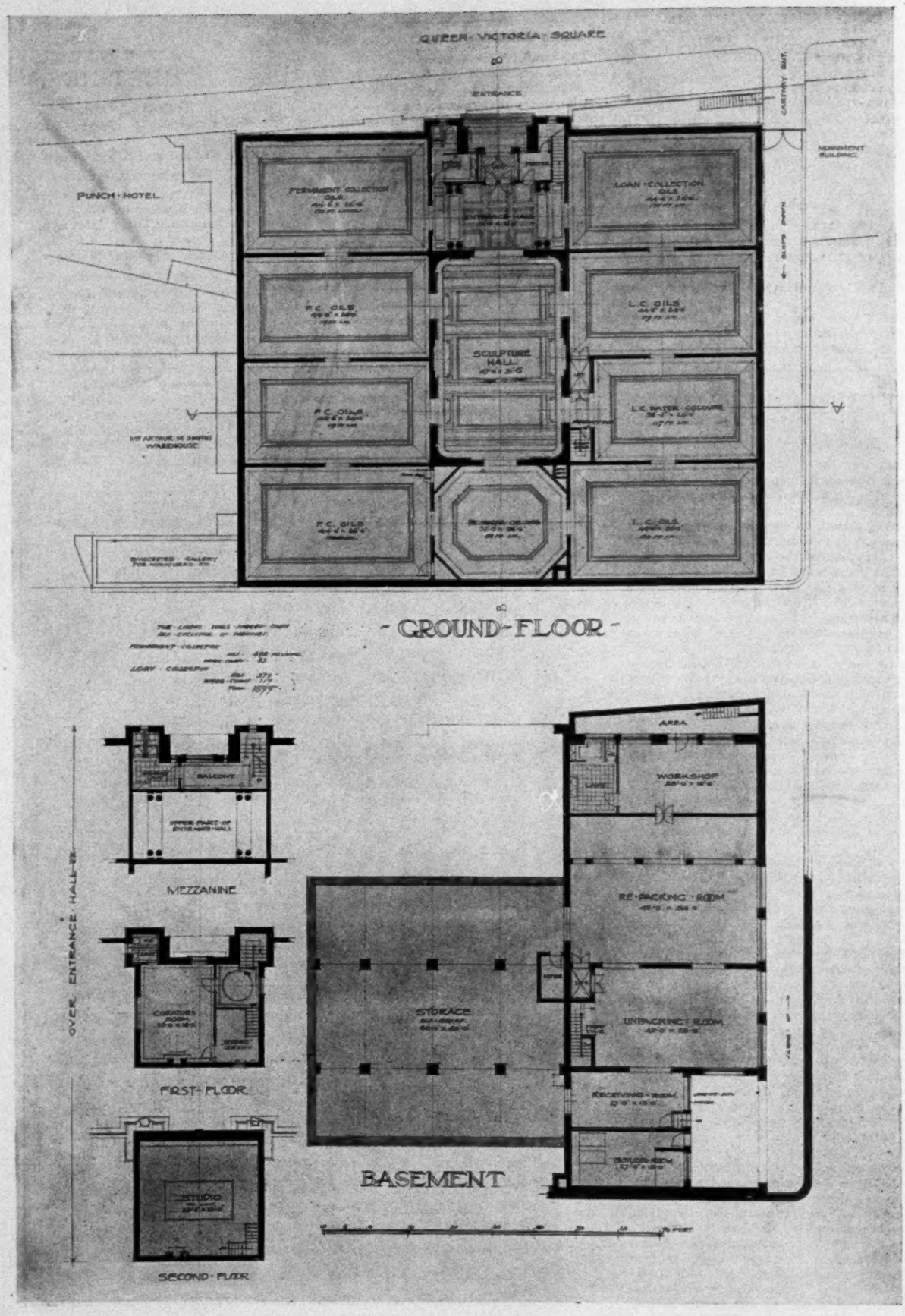
Society of Antiquaries.—Mr. R. G. Collingwood on "Roman Milestones in Cornwall." 8.30 p.m.

Incorporated Institute of British Decorators.—Mr. J. H. Sexton on "Fresco Painting." At Painters' Hall, E.C. 4. 7.30 p.m.



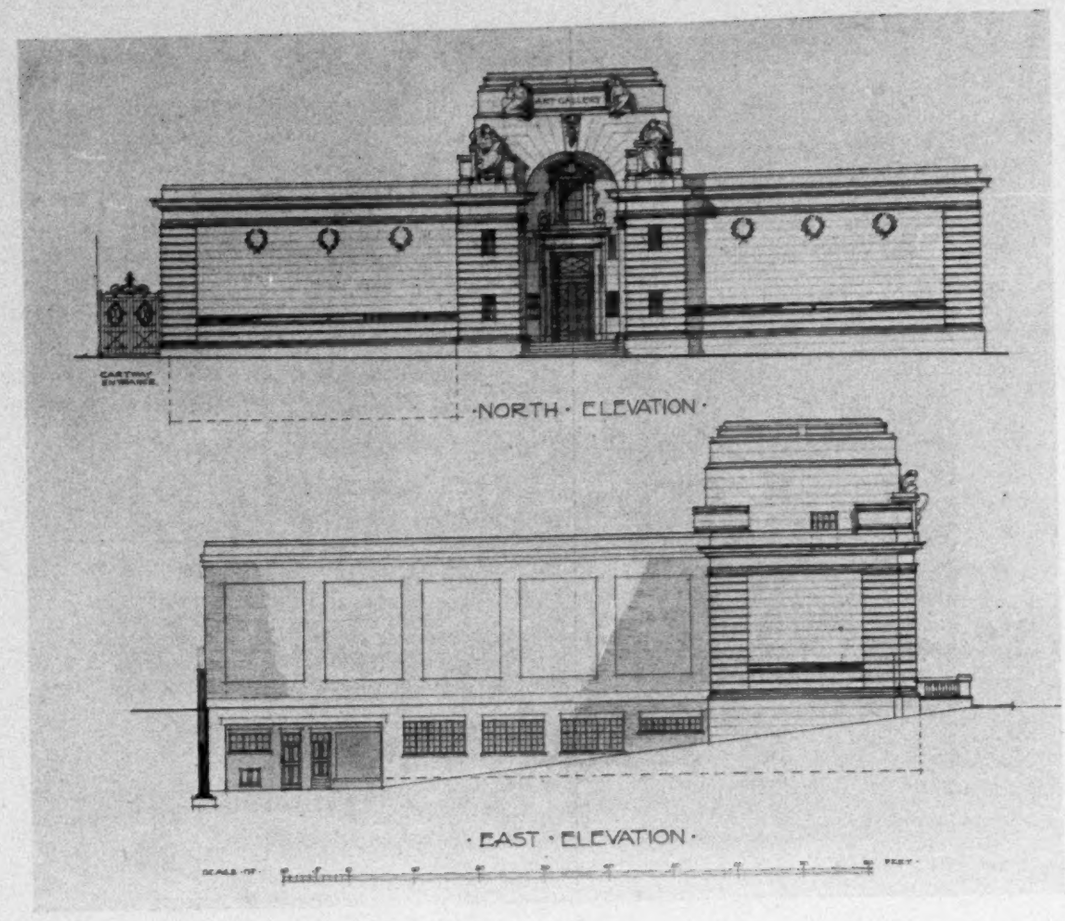
War Memorial, Lahore.—MR. B. MATTHEWS, F.R.I.B.A.

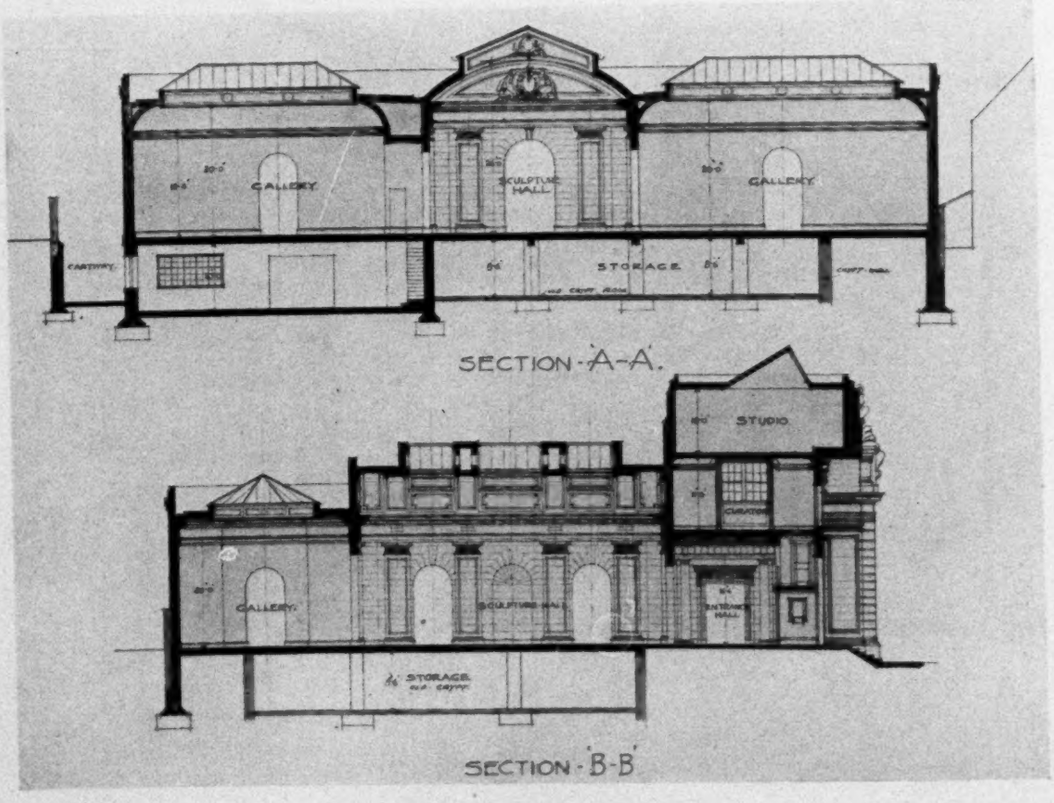
[This memorial has been erected to the memory of officers and men of the Royal Sussex Regiment who were killed in action in India. The materials are Agra stone, with white marble for the inscriptions.]



Hull Art Gallery Competition.

Design placed second: By MESSRS. J. S. GIBSON & GORDON, FF.R.I.B.A.





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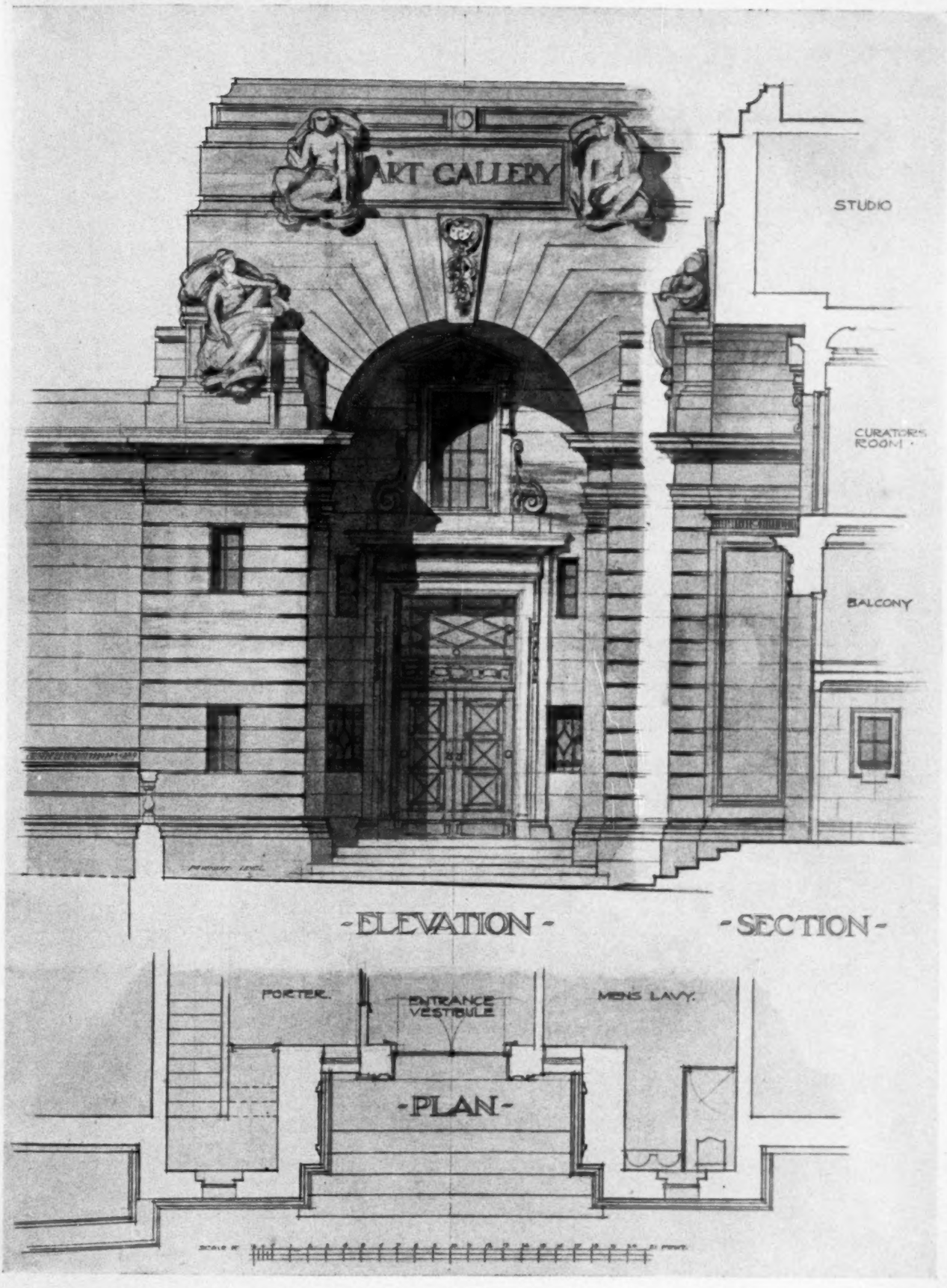

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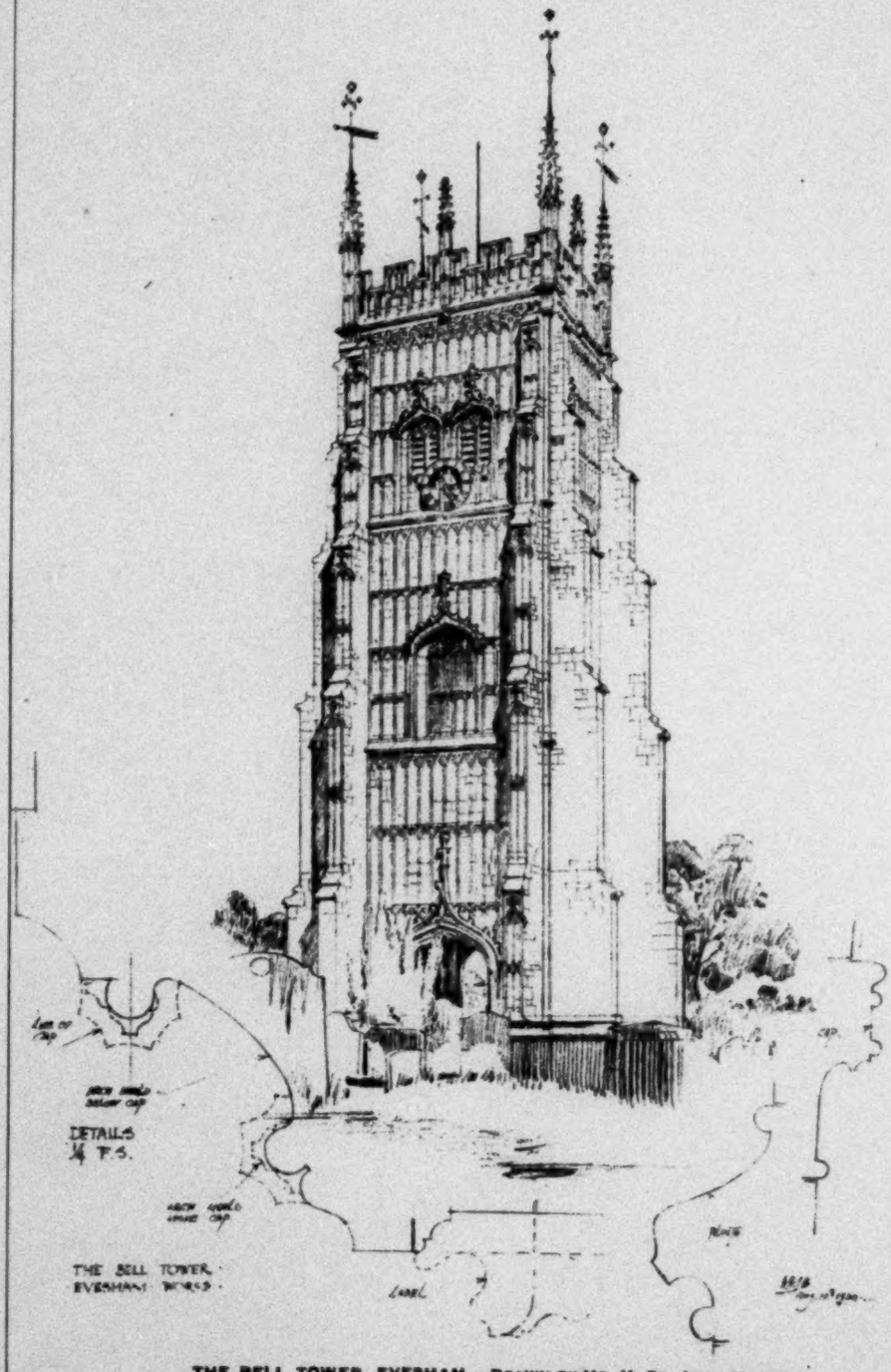
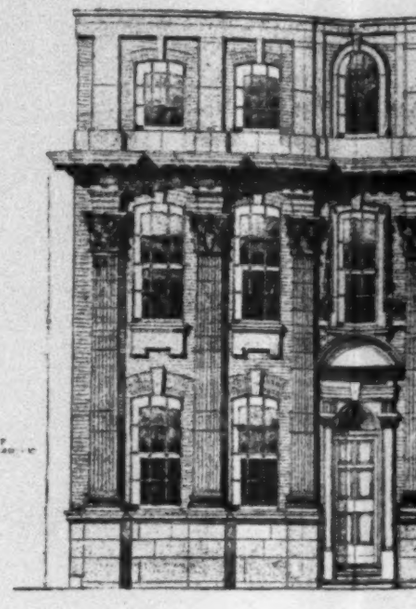


THE BELL TOWER, EVESHAM. Drawn by Mr. H. St. John Harrison.

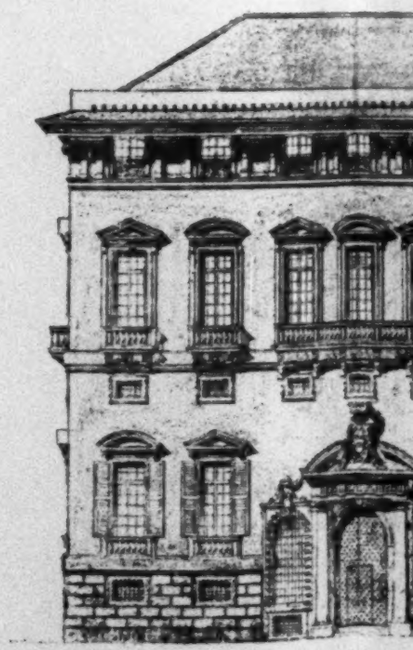


ELEVATION

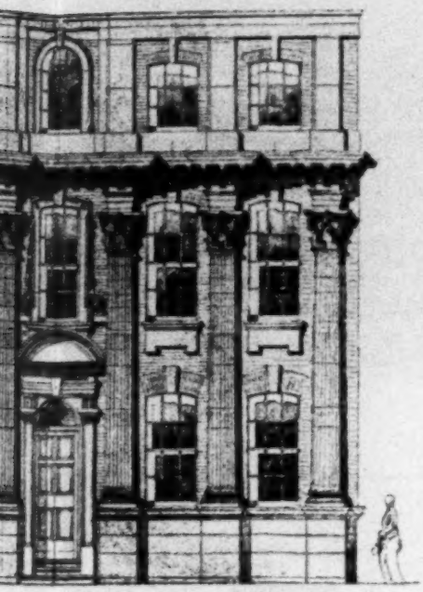
PLAN

THE ODDFELLOWS CLUB, COVENTRY

Measured and Drawn by Mr. H. St



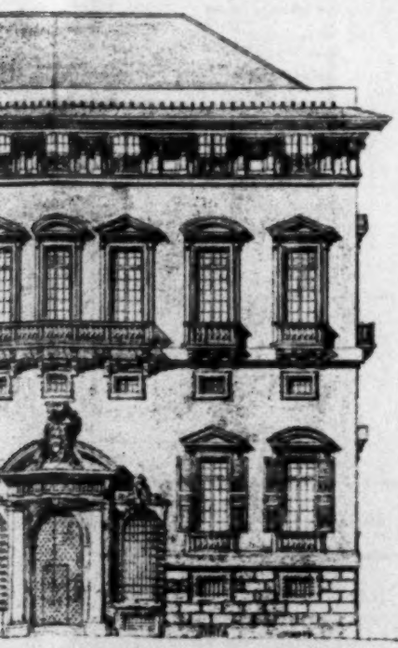
PALAZZO SERRA, GENOA. Drawn



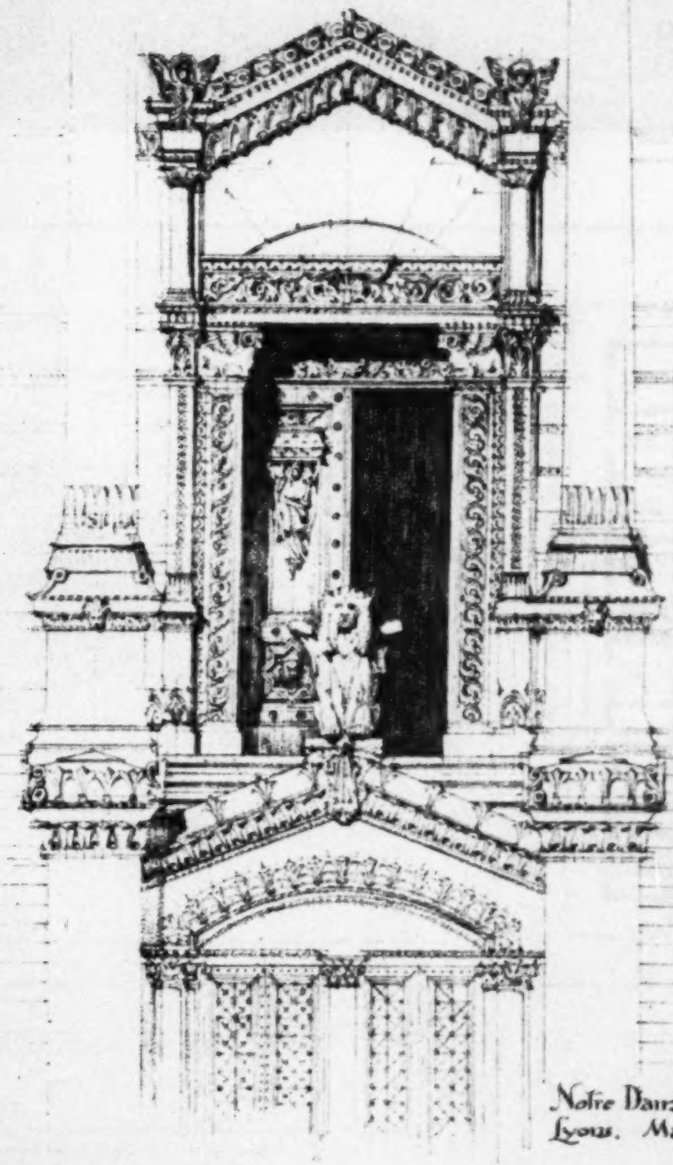
ELEVATION

PLAN

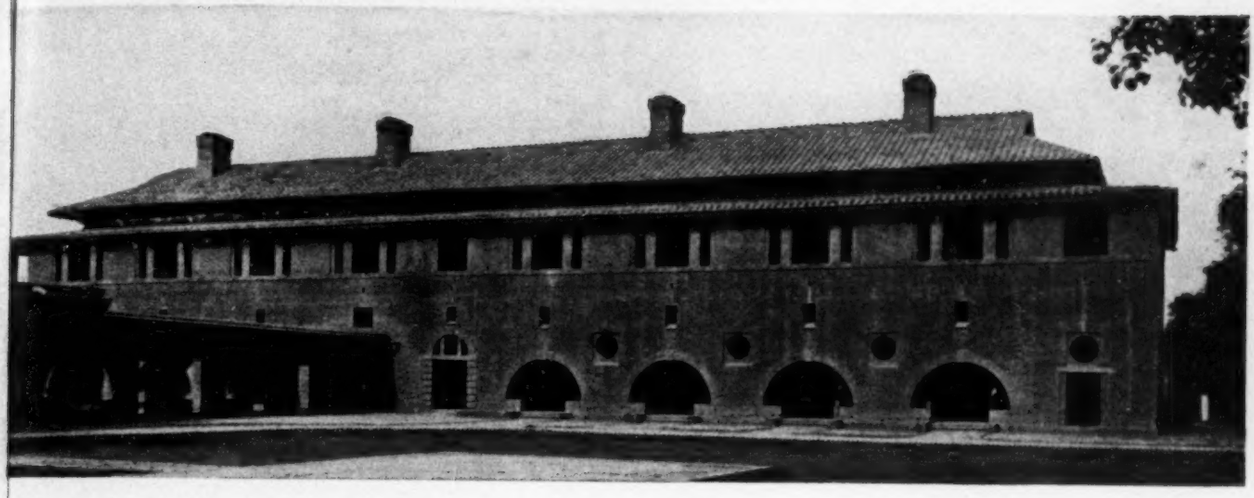
B, COVENTRY: DETAIL OF FACADE.
N BY MR. H. ST. JOHN HARRISON.

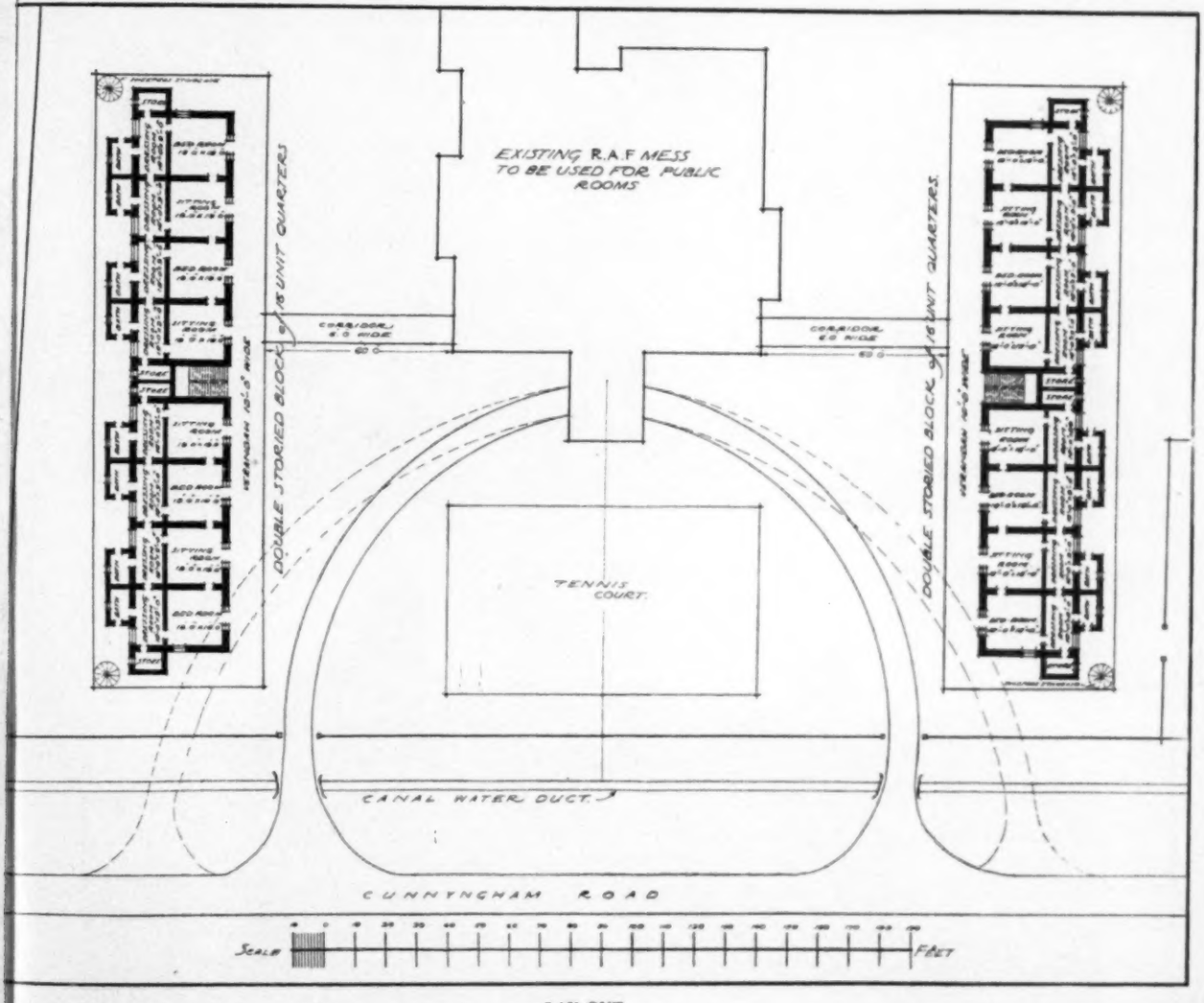


OA. DRAWN BY MR. PHILIP D. HEPWORTH.



DRAWN BY MR. PHILIP D. HEPWORTH.





LAY-OUT.

Hostel for British Officers at Lahore.

Mr. B. Matthews, F.R.I.B.A., Consulting Architect for Military Works in India. (*See p.* 881).

ONE OF TWO BALANCING GROUPS.

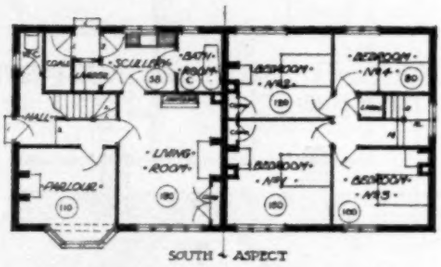
ONE OF TWO BALANCING GROUPS.

Hendon Urban District Council Housing Scheme: Child's Hill Site.

MR. GEORGE HORNBLOWER, F.R.I.B.A., Architect. (*See p.* 889).

:TYPE~ B:21:

~FRONT~ELEVATION~



SOUTH ~ ASPECT

~GROUND~FLOOR~ ~FIRST~FLOOR~

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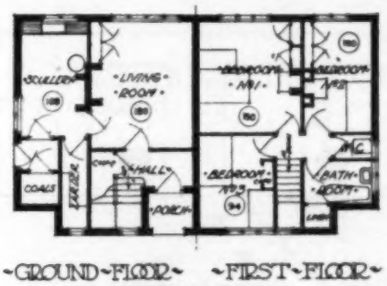


~GROUND~FLOOR~ ~FIRST~FLOOR~

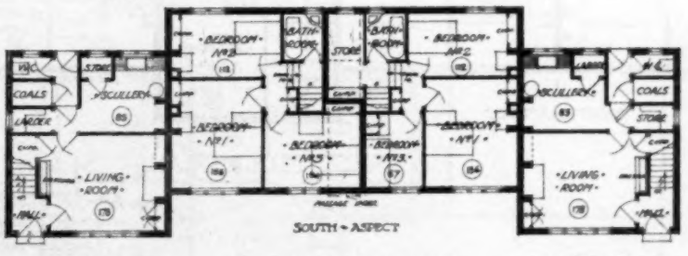
NORTH~ASPECT

:TYPE~ C:21:

~FRONT~ELEVATION~

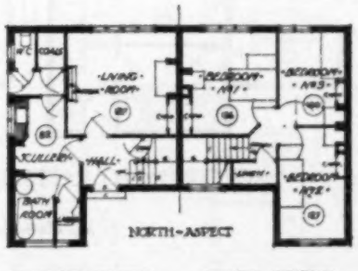
:TYPE~ B:26:

~FRONT~ELEVATION~



SOUTH ~ ASPECT

~GROUND~FLOOR~ ~FIRST~FLOOR~PLANS~ ~GROUND~FLOOR~

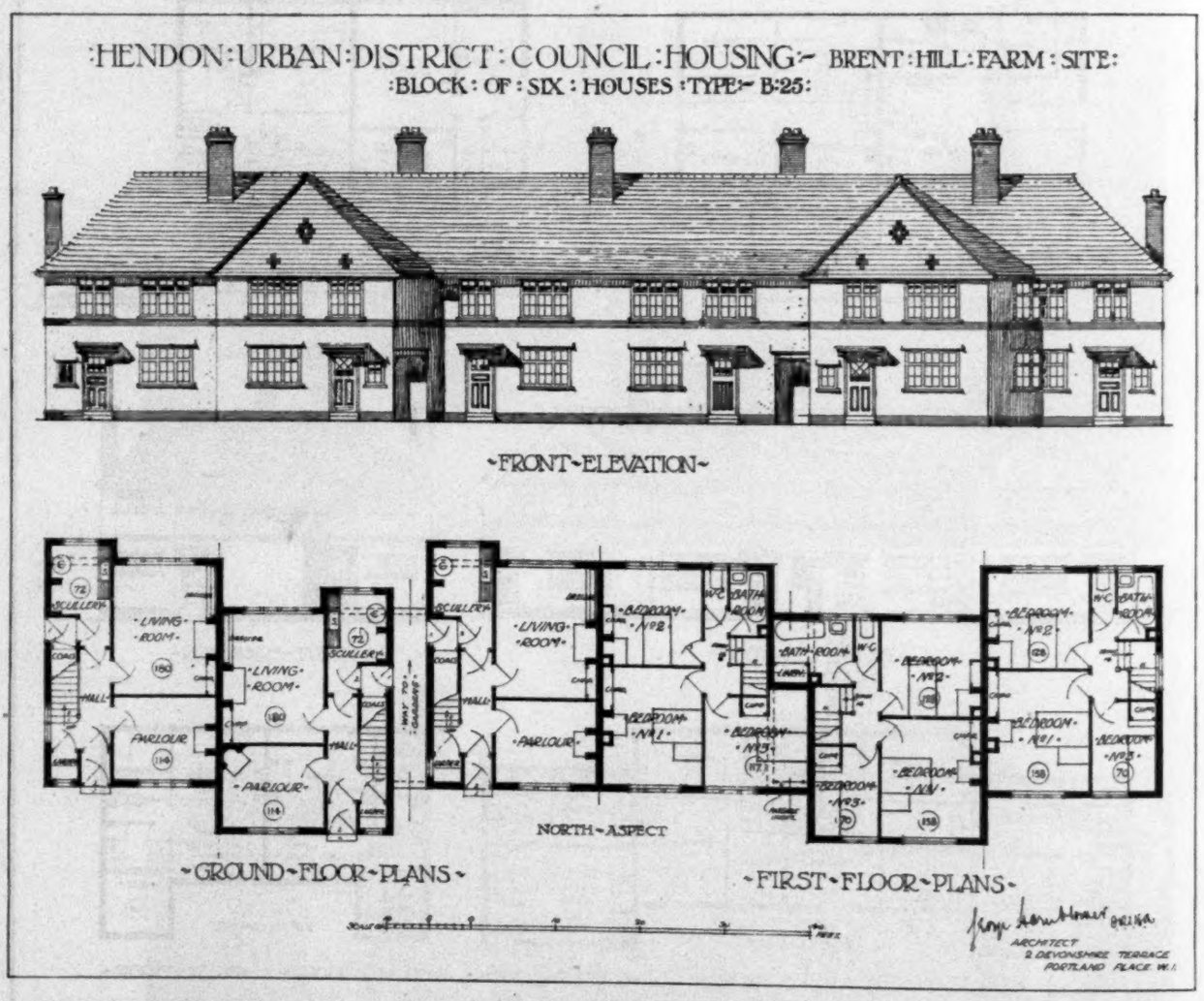


NORTH~ASPECT

~GROUND~FLOOR~ ~FIRST~FLOOR~

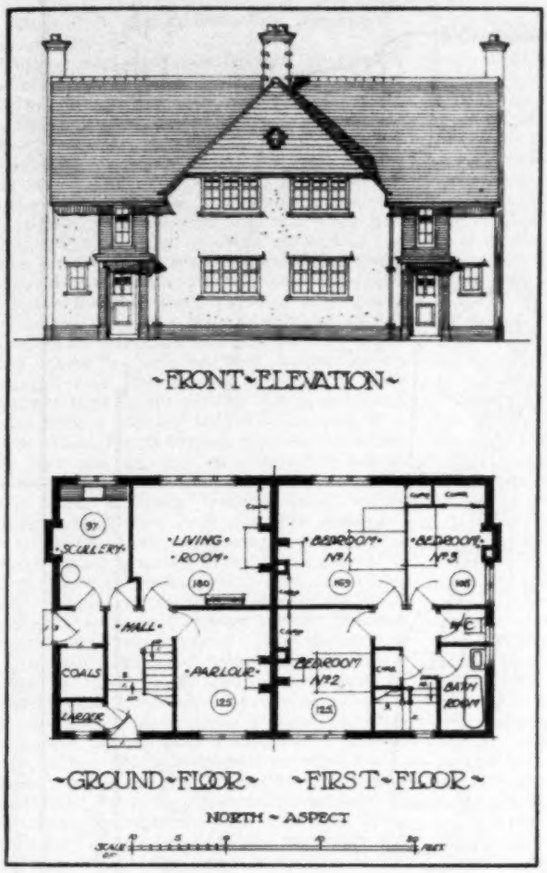
Hendon Urban District Council Housing Scheme: Brent Hill Site.

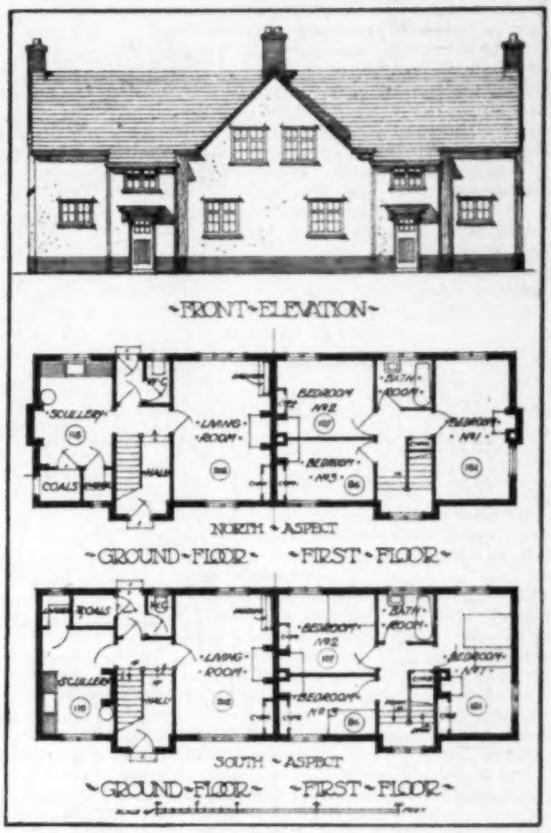
MR. GEORGE HORNBLOWER, F.R.*I.*B.A., Architect. (*See p.* 889.)

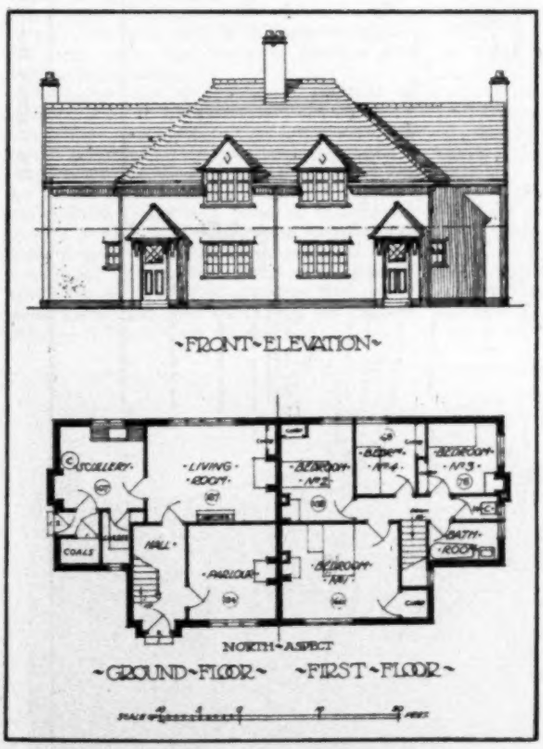


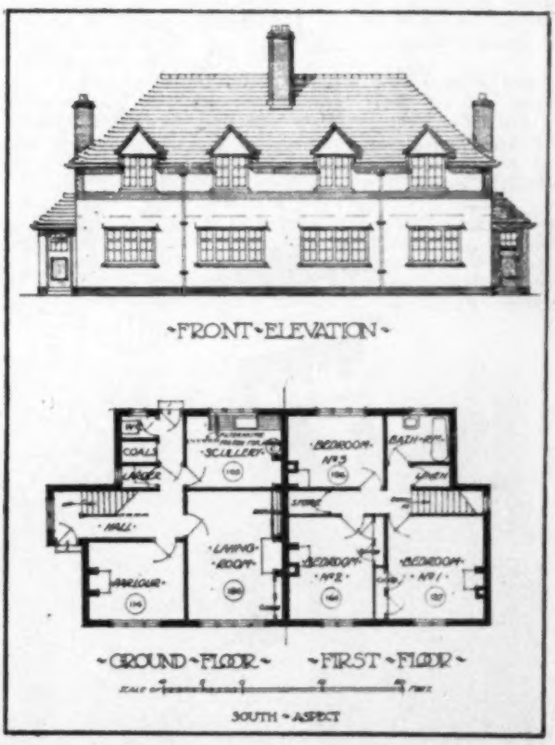
Hendon Urban District Council Housing Scheme: Brent Hill Site.

MR. GEORGE HORNBLOWER, F.R.I.B.A. (*See p.* 889.)



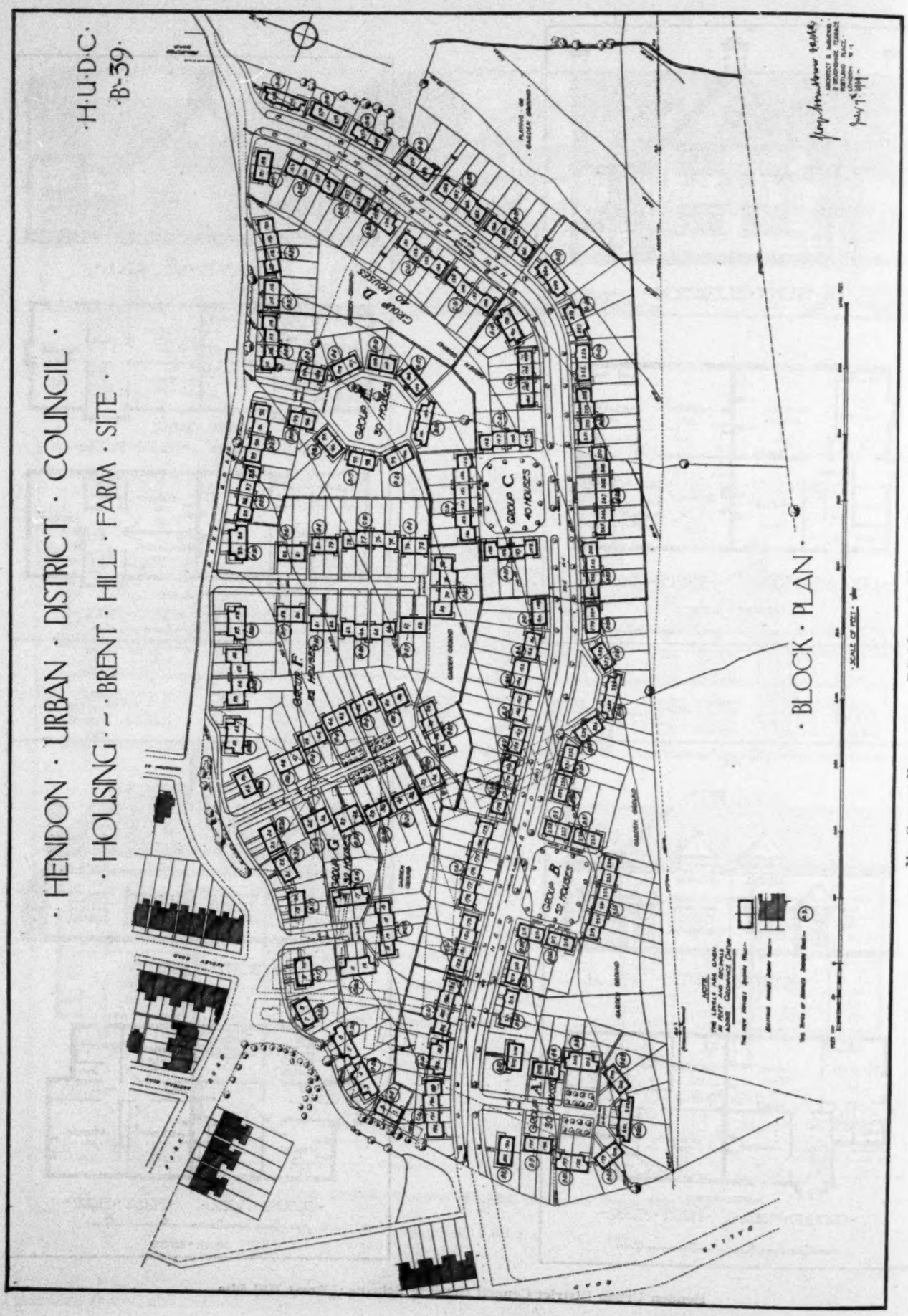






Hendon Urban District Council Housing Scheme : Brent Hill Site.

MR. GEORGE HORNBLOWER, F.R.I.B.A., Architect. (*See p.* 889).


·HENDON · URBAN · DISTRICT · COUNCIL ·
·HOUSING · — · BRENT · HILL · FARM · SITE ·
·H·U·D·C·
·B-39·
· BLOCK · PLAN ·
GROUP A. 32 HOUSES
GROUP B. 32 HOUSES
GROUP C. 40 HOUSES
GROUP D. 40 HOUSES
GROUP E. 32 HOUSES
GROUP F. 32 HOUSES
GROUP G. 32 HOUSES
GARDEN GROUND
SCALE OF FEET

MR. GEORGE HORNBLOWER, F.R.I.B.A., Architect. (*See p.* 889.)

ARCHITECTS AND ADVERTISING.

MR. R. D. ROBSON, of Barrasford, Northumberland, writes:—

SIR,—I read, with some interest, Mr. Overy's letter appearing in a recent number of *The Builder*, and although we may probably differ in detail, I am (from experience) in complete accord with the substance of his remarks. I should like it to be quite clear that I take his contention to be "that the present unfortunate state of the profession, where the unqualified man can and does abuse the title architect whilst the qualified gentleman, or lady, is pushed into the background, is remediable, and remediable by architects themselves."

It is well to bear in mind that for the majority of the profession the æsthetic point of view is equalled by the more mundane one of "bread and butter"; and, as they cannot all be engaged with monumental buildings, so they perforce turn to the smaller things, for every man needs a building for his home, and, to a great extent, for his business and his recreations. No man can say that an architect is less an architect because his first consideration must be "to earn a living"—architectural ability cannot, thank God, be bought with money!

All round us we see, glaringly, the hand of the charlatan in architecture: in the absence of town planning, haphazard lay-outs, and buildings without any merit except that the walls enclose a space and support a roof. One has only to study the reports of "plans passed" by one's local council to notice that builders—some of them good and efficient men as builders—are responsible for the majority. I go further. I have noticed plans of some magnitude having been submitted by persons who, in my opinion, possessed no other knowledge but a smattering of construction, it evidently being up to the contractor to surmount all difficulties himself as the work proceeded. In all the cases I have in mind I believe the people who instructed these men were under the honest impression that they had secured the best advice—of course they had (if one asked them), or why had the assignee designated himself far and wide as an "architect"? But who is to blame? The "man in the street" (always the potential client) associates architecture and the architect with great buildings and schemes costing fortunes, for it is only in this connection, *via* the daily press, that he ever hears of the architect's existence.

The other day a gentleman, desirous of adding a wing to his house, consulted first, in turn, three small country builders, and was then recommended by one to consult me. I was, for certain reasons, unable to undertake the work; but it appeared that the reason I was consulted was that none of them could prepare a plan, and were quite incapable of giving a price without one (leaving aside other formalities). I shudder to think of what might have happened to a fine old house had one of them made bold and shouldered the responsibility. I know them all well.

Again, a gentleman of my acquaintance constructing a cinema had, so he casually told me, some difficulty in finding a qualified architect in the neighbourhood as he was not acquainted with the methods of "digging out these retiring birds." I may add that he was candid enough to tell me that the need for an architect only arose when he discovered that the combined architecture of himself and his builder was not the architecture that had fired his imagination; and, incidentally, that the letter of the law had been somewhat overlooked.

Another gentleman (an influential person) of my acquaintance desired to add to his factory; his builder copied what existed. The gentleman now proudly claims to have saved a heavy overhead charge in the architect's fee. He has saved a little, but I never hear of him proudly boasting of the result.

Now, I ask, why does the architect not tell his fellow men what he is and what he stands for, and that architecture is not necessarily big building or an overhead charge (it may be a considerable saving) for, at the moment, that is only obvious by reading the technical press, which the layman has not the time or inclination to do. I feel that architects are too far away from their fellow-men; they must get nearer to them, and the only means open as far as I can see is advertising. (Yes, there is protection, when architects would have to be consulted, but the great ideal of this is evidently now subservient to a detail.) It is but folly to sit still and plead æsthetics (admirable as they may be) as justification to an unheeding world.

I remember some time ago a gentleman writing in a contemporary technical journal that he abhorred the idea of, and the blatancy of, advertising; it was reducing art to commercialism. There is advertising and advertising, but the English Dictionary only contains one word for all degrees. It is one thing to tell your fellow-beings how your particular knowledge and capabilities will benefit them (and if you are possessed of such attributes it is, I consider, a moral duty to do so), and quite another to announce far and wide, from the hoarding, the papers, &c., that one's cure for bleak landscapes, ugly vistas, and the misuse of materials is the "real goods." But no architect would do that; rather let him be permitted to state simply that he is an architect, where he is to be found (few laymen possess directories, and fewer still know where to find them), and possibly with a list of his works, so that the layman may go, see and judge. This I would advocate only in selected and approved newspapers and periodicals.

In these controversies one is invariably met with the so-called parallel of the doctor. There is an affinity—both are professional—but there is no parallel. The doctor is protected, architects are not, and the doctor deals direct with his client. With the architect there is an intermediary—the contractor or craftsman, without whom the architect cannot function.

Capable men are turning away from dire necessity from the profession—it is overcrowded. But I firmly believe there would be no overcrowding if architects were consulted in only 50 per cent. of the building work undertaken and in which they ought, undoubtedly, to be consulted.

I agree with Mr. Overy that it is hard to read newspaper advertisements with "architect" tagged on to a host of other occupations and not to know that the gentleman so designated has but a scanty claim, if any at all, to the appellation. But—and this is serious—the gentleman of the multifarious service is probably the man consulted by the layman; the result, in the majority of cases, is deplorable and as a consequence derogatory to the profession as a whole.

Some of your readers will hold other views, and I hope this matter will be thoroughly ventilated—it seems to me to be of paramount importance—so that we may arrive at some standpoint as to where the majority of the profession feel they do stand.

HENDON URBAN DISTRICT COUNCIL HOUSING SCHEME.

THE Hendon District Council have carried out housing schemes in Central Hendon and also in the Child's Hill Ward, which adjoins the Hampstead boundary.

The Brent Hill scheme (consisting of 244 houses) has been carried out partly by the Improved Concrete Construction Co., Ltd., and partly by Messrs. J. E. Billings, of Oxford; Messrs. Perry & Co., of Ealing, W., being at present engaged on a further twenty houses. The greater number of the houses are of concrete construction, the walls having a cavity and rough-cast externally, with brick plinths, strings, chimneys and dressings; others being built of brickwork rough-casted. A considerable number of designs have been provided in order to avoid monotony, and further variety has been gained by the introduction of tile-hanging, varying the details of the chimneys, &c.

The Child's Hill scheme is a continuation of the former Council group of cottages carried out from the designs of the same architect in 1914–15, the construction throughout being brick, rough-cast; and the contractor for the whole group was Mr. Geo. Ramsbotham, of Hendon.

We understand that these Hendon houses have the distinction of being the only plans which were not cut down by the Ministry of Health. Winding steps are avoided in all but one of the many types, and bay windows are introduced; even porches in several instances were allowed to remain.

Mr. W. Hughes acted as clerk of works for both schemes, with Mr. F. Bush as assistant clerk of works. The architect for both lay-outs and for the whole of the houses was Mr. George Hornblower, F.R.I.B.A., of 2, Devonshire-terrace, Portland-place, W.

Hendon Urban District Council Housing Scheme: Brent Hill Site. MR. GEORGE HORNBLOWER, F.R.I.B.A., Architect.

THE BUILDING ART: THEORIES AND DISCUSSIONS.—XII.

By W. R. LETHABY.

WORDS OR REALITIES? AND POSITIVE ARCHITECTURE.

It is a matter of observation that the introduction of antique ornamental features goes with a decline in constructive power.—PROFESSOR J. STRZYGOWSKI.

THE quotation above, taken from a new book on the Origins of Christian Church Art, which I have been reading, is obviously true. The mind must be set on the things that are in front or on those behind. We must either be pressing on or slipping back—positive or negative.

I doubt if much can be done if it is merely left to our wills and intelligence, the powers of the "world" are so very strong; but it is our duty to try and every trying makes some difference. We must, in fact, in the larger measures of things, either develop or decay, but I know these larger considerations are rather remote, and there always seems a chance for us individually in some competition scramble. But if we could only divert our gaze from paper palaces and turn towards realities, following the way of experimental, economic, and manly building, in trying to work out reasonable schools, houses, and butchers' shops—the common problems of daily life—we should reach quite quickly a *Positive Architecture* not only fit and proper to our age, but one we could understand and discuss with others without the mystery voice. It would be good for us as well as for society. "Architecture" at least builds architects.

It is an absurd tragedy how we have been misled by the novelette view of "architecture" and other grand words, to which we won't take the trouble to fit meanings: Art, architect, design, originality, style, proportion. It does not matter a bit if we call *truth*, "verity"; or if we call *firmness*, "stability"; but it has mattered much that we have divided *work* from "art," and *building* from "architecture." Owing to our way of double-dealing with very slippery words it is now very difficult indeed to get a thought passed from mind to mind. Unless the wireless is properly tuned, we don't get the message, and we can only see things from our own window.

"Physical Energy."
By the late G. F. WATTS, R.A.

Our phrase, "a work of art," is an unfortunate duplication, but even as it is it should at least mean a work of workmanship. In any case, we have little reason to bother and confuse ourselves about architectural works of art. What works worthy of the name and proper meaning have been produced in England during the later centuries? St. Paul's, we may readily grant, is such a work; it is a monument of its age, the life work of a great Englishman, and in it are associated many fine forms of workmanship. Then there is Stevens's Wellington Monument, which, indeed, is throughout a work of workmanship. Thirdly, there is Watts's "Physical Energy," in Kensington Gardens. Further, there are a dozen or two productions, like Somerset House, the Oxford Rotunda, &c., which may be allowed to pass in a secondary class; but there is little else in the way of building or monumental art to worry ourselves over. I cannot think that any well-known building erected in England within the last hundred years should count as a work of art.

"Architecture" is a pretentious parasite word that has settled down on *building* and eaten the strength out of it. There is something so "grand like" in spelling over the word, a-r-c-h-i-t-e-c-t-u-r-e, explaining about its being the king and queen, master and mistress of the arts, and in reading æsthetic disquisitions, that it strongly appeals to our weakness—especially in youth—and turns our heads, so that thereafter it is difficult to see straight. When the New Testament was put into English the word architect was translated "Master-builder." "Design" has so separated itself from *doing*, of which it is properly an essential part, that a large sphere of *designing activity* has almost completely detached itself from *building experience*. Ateliers work with books of examples of periods, features, and styles. On this supervenes and flourishes draughtsmanship in composition of style-features, leading up to brilliant prize draughtsmanship in the re-composition of dead and decadent features (composition of decomposition). Then the system is rounded off in competitions of the double extra expert style draughtsmen, adjudicated according to professional racing rules. Last of all come the poor buildings. The beginning of building wisdom is the sense of weight and responsibility: paper designing necessarily runs to the light and flighty.

Again consider the word *style*, what we mean and what we might mean by it. Our rough first notion, I suppose, would be something like this—"the characteristic appearance of any thing or group." I look into Skeat and find that its probable derivation is from *stilus*, a writing instrument, and hence it comes to mean a manner of writing or doing other things. In a French dictionary the meaning as used in the arts is given as—"Manner, particular to an artist, to a kind, or to an epoch." That is admirably concise and clear for the descriptive meaning; but it does not touch the differences between good and bad style, and what we should aim at in our own efforts. Take an example from literature: there is the style of Wordsworth, in the technical and descriptive sense, and there is his style in the general, human and positive sense, his thought, his aim, temper and meaning. Now I want to suggest that we need to understand that building and any other form of art exhibits style—good or bad in this larger sense. Style of this kind we might define as *expression of the content*, for every thought and thing that goes into the production of a work of art will in some way tell in its expression just as faces come to paint minds. I won't speak of

"Physical Energy."
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deeper things, but only of commonplaces; think, however, that the style of any time or country is shown by reality and soundness, by fairness and finish, by organic structure; or by tawdry make-believe and sullen gloom. The style problem to us is what may be put into our works of sense and serviceableness and then the expression will take care of itself. Seek reality, not the "look" of expressing expression. It is reality which makes the style to all who can read it. I must not speak of nobility, intellect, courage, and other high aims; but I may say that mere common sense followed for a year or two would make a common-sense style. The only style question that matters is: What is in a work?

A word good enough in itself has been quite spoilt in its recent use; this is *composition*. All planning and fitting together is composition, but the idea has been destructively pressed, that there are specially "art forms" of "composition" going beyond general ideas of order, efficiency and tidyness. It is not so, and all such notions stand in the way of true and expressive composition. A ship or motor-car are wonderfully composed—everything is right, balanced, and in order; but preconceived ideas of "art" composition would only have prevented the finding of right solutions. Now that in New York the necessities of getting light down into the street has resulted in the pushing back of the upper stories of their tall buildings—a common sense structural arrangement—we are rushing to copy the look of it, at quarter scale, as "style, composition, and massing"!

Among the most betraying words are "ornament" and "decoration"; being useless and generally worse than useless we concentrate enormous attention on them. "Ornament" in the main arises in three ways: primarily in magic marks to ward off evil, secondly in luxury, and lastly in workmanship. This last is the permanent and universal source. In all functions well fulfilled there is likely to be a little extra thrown in for fun. If you take a dog for a walk he does a bit in excess to show that he likes it. Children give a skip and a jump. A cook adds a few touches to the pie-crust. A workman, free of his job, cannot help, especially near the end, giving a turn to his tool. Our modern ornaments are like the smiles of children who have been warned that they will be flogged if they don't skip. The "look" of joyful workmanship imposed from above is an imposition, indeed.

Mechanical structures have the interest and even the *mystery* of their reality and necessity; they reveal the very nature of things. But mechanical ornament is a contradiction in axioms and definitions; it is a gratuitous addition of labour and sorrow—a sham and a shame.

Tradition is often used in our ambiguous and, indeed, upside-down art language, as if we might resume it at will at any point we for the moment like. I remember seeing in some "advice" to students on the way in which

they might "treat their designs," it was suggested that the "treatment" might be modern or traditional, as if *our* tradition could be anything else than modern. In a notice in the "*Revue des Deux Mondes*" (Nov., 1922) of a new account of French art, by Louis Gillet, being part of a general "History of France," I noticed these admirable remarks: "His purpose is to bring out the national tradition. This strangely abused word he uses in its veritable sense. Tradition is not that which one accepts from the past, it is a legacy which, in spite of one's self, runs in the blood. It is heredity which may not be denied or eluded, it is the race, the temperament, the continuity of life itself." That is tradition, indeed: its very essence is that it is exercised spontaneously.

Then there is a class of words like utility, construction, and building, which we are always interpreting in a negative rather than a positive sense, as if we said a *mere* utility, *poor* construction, *mean* building. I have often used "mechanical" in that sense myself, but this use of words may betray one. A perfect loaf of bread, or ship, or roof (if we could only find out how to make one), would be a utility; but it would be absurd to prefix the word "mere" or "poor" to our thought of it. Mechanisms themselves, so far as they are real and serviceable, are vehicles of spirit and of poetry. The Forth Bridge has qualities of power and adventure which might well make it a subject for a poem by Mr. Masefield. Compare any styleful recent building which comes into your mind; could anyone write a poem on that, except in the key of pathos? It is only by reality we can hope to get back the poetry in our buildings, so that the mention of them may sound like bridge, barn, sheaf, rick, plough, fiddle, balance, loaf, cradle, mirror, anchor, boat, wagon, engine, crane, clock. Nothing is wrong with worthy mechanism.

There is a quite modern word which I should like to consider: this is "standardisation." The modest and distinguished architect of the Bush building some time ago said that works were more standardised in America than in England. Now here is that valuable thing, an *idea*; what shall we make of it? It occurs to me that there may be two ways of thinking about it; to suppose straight off that it means turning out tens of thousands of buildings, planned in a Government office, all exactly alike, and bad at that; or to understand it to mean the development of types, the drawing away from waste and anarchy in production, and the attempt to reach real and rational solutions. In the latter sense, I am all for standardisation. Grouping by types seems to be in the very nature of things. A dozen examples might be given, but I will mention only the old traditional art of ship building. One might have thought that there would be a steady gradation of change from a small boat to the biggest ship, but masts and sails ruled that ships should be classed into groups—the smack, brig, barque, &c., &c.—and gradually in the search for perfection every detail became "standardised." We need something of the sort for our buildings; first, the grouping; and then the detailed development of reasonable working parts, doors, fireplaces, windows. How do we "design" a house now? Almost as if one had never been built before; in any case, there is no large body of experience readily available; the necessary services, like heating, water and light supply, are ever fresh surprises, and every architect feels that he must "design" any "nice details," like doors, stairs, and chimney-pieces, all over again, even to the "mouldings." It is easier, indeed, to draw new "profiles" on a "detail" for the hundredth time than to standardise office procedure.

If we follow need and reason, there should be no fear of dreary monotony, differences of site, individual requirement, and development will arise and give all necessary variation. The wrong idea of standardising suggests low level fixity; the right manner of seeking to standardize—it is no paradox to say—brings about unceasing movement by experiments to make perfect. Without the standardising aim we are for ever subject to whims and casting back on our track; with it, we might hope to bring some order out of the present chaos of anarchy, whim, and vulgarity. These examples of "architecture" in the whim and seem-so styles, which we are so excited in getting designed and then executed—poor things—in days of stress have something portentous about them; there is invisble writing on their walls.

There is amazing ability amongst our architects, and that makes the present scattering and squandering of effort all the sadder. It must be said firmly that while they continue to "design architecture" according to "taste in the styles" they are building not only on sand, but with it. It cannot be done; the better it seems for a moment the worse it is in fact, for only reality counts in such arts as agriculture, building, navigation and the rest of the great human occupations. I visited the recent exhibition of photographs and models at Grosvenor House and wondered at the perfection to which certain kinds of *seeming so* had been brought. The show would have delighted me beyond estimate when I was about seventeen and thought as a child. There was just the right look of this and that—"Country Life"-ness, simple workmanship, poetry, innocence, accident, and age. All the "effects" were laid on with exquisite tact and cunning on these ancestral looking houses for the newest rich; but I felt in my heart that such confections were not natural and real enough to last.

While we aim at being in any style or manner the result must *necessarily* be a sham, or second-hand, thin and poor. Greek, Gothic, Renaissance, the picturesque, the grand manner, and the Beaux-Arts manner are only names and limitations. In place of these appearances and flavours, the smell of art, we must learn to see our projects and buildings through positive facts and stern conditions. We need to have education and thought founded on a positive method of design and appreciation—something of the kind which may be suggested by the classification which follows.

Structural mathematics, geometry, and mechanics; common needs and planning; materials and workmanship; living experience of the working and use of stone, wood, brick, iron, plaster, &c.; local building custom and recipes; constructive factors, walls, piers, floors, roofs, arches, domes, vaults, buttresses, windows, skylights, staircases, chimneys, &c.; organic arrangement and appreciation of weight; balance and stability in the arrangement of parts or cells, and efficiency in services; common conditions and circumstances, neighbourhood, site, sun, aspect, air, dryness, durability; lighting, warming, sanitation, economy; ease of access for repair and cleaning; labour-saving in maintenance (very important); types and species, public buildings, houses, shops, &c.; order, compactness, intelligibility; finishing and furniture, employment of contributory arts, painting, sculpture and other forms of free workmanship; combinations and lay-out; contact and agreement with builders, engineers and craftsmen; experiment, development, invention. Our aim in three words is nothing less than *perfection in building*, the development of a positive Architecture.

Having in mind the fact that we can neither go back nor stay where we are, I will put down in briefest manner what I suppose should be our immediate aims.

The individual student should make up his mind what sort of "architecture" he intends to pursue—realising, of course, that ordinary work is necessarily of an average kind and not all palaces in the air or casinos on a lake. Will he concentrate on the lively and really romantic art of building, or on the flash fashion-plate sort of "architectural design"? Every student must try to form some general thought of purpose as a "perch to his mind," and not be swept along unreflecting into the advertising demi-monde view of "architecture." The problem of architecture as it should be presented to the student's ambition is how to build rainproof, cold-proof, folly-proof shelters.

The schools should turn towards facts, common sense, common service, and structural science and drop the "æsthetic" rhetoric utterly. Such doctrines are hardly now tolerated even in schools of "Fine Art," save in the architectural departments. In such schools they try to teach how to paint and how to model and there is little style talk laid on. So in a school of "architecture" the students should be taught what is known of how to make good buildings and not how they are to slime them over with style "looks."

Best of all, I should like co-education with builders, engineers, and craftsmen up to a point, so that a youth would form contact with other workers in the same cause and have some choice as to which path would suit him best. It may be attempted to make up for lack of practical knowledge in the schools by adding classes to show what work is like. Such showing what things are "like" instead of what they *are* in the real world, is dangerous and only increases the area of the abstract and unapplied. It could not be in such facts as digging foundations and putting in concrete, but might be in the modelling of "swags" and carving of "eggs and tongues."

Architectural societies should develop in the direction of the guilds; and have the common average good in view rather than the flotation of eminence. They should make themselves centres of research, experiment and record, and work towards the bettering of the great wide-spread mass of common building. Above all, they should cease to recognise and adjudicate on competitions for buildings. The very first purpose of a guild is to protect the members from bidding against one another; that it should be accepted as a regular institution together with fees for adjudication seems to me intolerable. Apart from the waste, these competitions encourage the idea that design for building is the preparation of taking—or "taking in"—drawings; an idea that has deeply saturated the thought of employing people. The training of the schools in the prize draughtsmanship of styles works in with the system and piles up a vast burden of waste labour on waste paper. The typical modern institution seems to be the waste-paper basket!

With this part I end these discussions. My theory of "architecture," such as it is, has not hastily been formed in some eddy of reaction. Looking back, I see that I have always held such views since the first days of disappointment, when I discovered the difference between old building realities and modern whims in the draughtsman styles. I have not been complaining, I have been less concerned with what is than with what will be. It is the future that matters. Directly we transfer our interest from the vague superstitions about "architecture, styles, and proportions," to a developing art of building we shall begin to have a positive Architecture once more. The very centre of our art is construction, clear and clean, vigorous, close-knit, and high-strung. When it is organic it will also be harmonic. I end with six key words: service, structure, economy, experiment, development, invention. But even this is too long, and I reduce it to service and structure.

An Exhibition of Architecture.

The Royal Institute of British Architects have been invited to arrange an Exhibition of Architecture in the Palace of Arts at Wembley. The Exhibition of Architecture will open on May 19, and will close on June 28, 1924, and will consist of a representative selection of the recent work of living architects in the United Kingdom, India, the Dominions and Colonies. It is proposed that photographs and models only shall be exhibited. The Exhibition will be of a general nature, except that Town-Planning and Housing Schemes will be excluded in view of the fact that a Town-Planning Exhibition is to be held immediately before the Exhibition of Architecture. The arrangements are being carried out by the R.I.B.A. Exhibition Committee, with the assistance of the Architecture Club. Owing to the limited space at their disposal and to the necessity for the display of representative work from the whole Empire, the Committee propose that the Exhibition shall be arranged by invitation only.

BOOK REVIEW.

Economics of the Hour. By JOHN ST. LOE STRACHEY. (London: Hodder & Stoughton.) Price 7s. 6d. net.

We do not suppose Mr. Strachey would put forward a claim to be considered a professional political economist, and probably this is one reason (out of many) why we like his book so much. The many academic books which have been written since the war have thrown so little light upon our economic problems that Mr. Strachey's book—written, as we imagine it, from the layman's point of view—should appeal to a wide public. The outstanding features in this book, to us, are its common sense, breadth of view, and, generally speaking, the soundness of the conclusions arrived at, even though all are not likely to agree with it in various details. Mr. Strachey's writing is simple and direct; he advocates with force and sincerity, and hits hard and clean. There is nothing timid about this book, which states many things which badly need stating at a time when industrial depression is acute, when every form of half truth and paradox has been eagerly fostered. It is a wholesome tonic to read a work of this nature which contains an economic philosophy dealing with broad principles.

Among many excellent points we draw attention to the following: "The real worth of anything is just as much as it will bring; the disastrous policy of limiting supply in order to endow an object with value; the perverted reasoning which makes one man shout for a limitation of supply while the other voice is shouting for plenty and low prices; the fact that it is never true that a fixed quantity of anything and no more is wanted; directly the price is greatly reduced the demand and the consumption increase; the great increase in labour-saving machinery, which, instead of employing fewer men, employs more men; the fact that the use of labour-saving machinery never injures the workman, but, on the contrary, improves his conditions; that trade unions, if they did not exist, would have to be invented in order to increase the power and dignity of labour, but that they cannot in the long run increase the remuneration of labour, for that is governed by external conditions outside their field of action."

The author pours ridicule upon "the industrial paradise where everybody may live in a splendid repose upon the idleness of everybody else." He points out that a man may some day realise that if he is a consumer in a hundred things and a producer in only one thing, it may be better worth his while to look after the keeping down of prices in the hundred things than in trying to raise them in one particular instance. Unfortunately we find that the man tries to do both at the same time and being unable to see the economic fallacy (of what is really a Gilbertian situation) each producer tries to keep up his own wages and prices. We see the humour in the remark of the Italian professor of political economy mentioned by the author, who is said at the end of a long life to have doubted whether the consumer really existed. The author does not say definitely that wages must come down, but that is the inference we gather from the book. "If every one wants more cake," he says, "a larger cake will have to be made. It is useless to argue about the division of the cake, for that is settled in the main on immutable principles."

In the chapter, "To Strike or Not to Strike," the author puts the whole position in a nutshell in the following passage: "After all, the men are partners with the masters, and what they want is not to injure the trade, but merely to get a different division of the total profits. To increase, then, the cost of production and so kill the demand first for the thing produced, and secondly for the labour of the producers, must in every case be an injury to the workmen who form the trade unions."

The working out of this division of profits in the chapter on "Dividing the Cake," reveals a mathematical solution which we believe has the approval of many sound economists. One could make a shrewd guess that the reason this recommendation has never been applied to solve our present difficulties is because it would be found that labour is receiving a bigger share than industry can provide.

On the principle that a burden is none the less a burden because it is imaginary, it may come as a relief to many to learn that the burden of war taxation is not so heavy as is generally believed. A large proportion of the cost of the war was paid year by year as the war went on; we lent money to ourselves and we are now paying income tax to pay ourselves dividends on our loans. The crushing taxation to which Mr. Strachey refers obviously applies to the spending departments of the Government, and not to the cost of the interest on internal loans.

Mr. Strachey contends that the rate of wages for labour engaged on work provided for unemployment should be less than the standard rate for legitimate economic work. The reasons he gives appear to us to be quite sound, but the most important one to us—which he does not mention—is the probability (and it may be a certainty) that by helping to maintain a wage basis higher than economic conditions warrant, we may be employing at one end and creating an equivalent of unemployment at the other.

We cannot, in the space at our command, refer to more than a few of the suggestive chapters in this book. It deserves the attention of every thinking person, and the author will have done a great service if he has succeeded in drawing attention to doctrines which have gone out of fashion as we acquired the habit of sinking our individualism and learning to lean more and more upon the Government for help.

Books Received.

WHO'S WHO IN ARCHITECTURE. By Frederick Chatterton. A record of practising architects and their addresses, and in many cases an appended list of their works. (London: The Architectural Press). Price, 25s. net.

ISLAMIC ARCHITECTURE. By Sattar Kheri. (London: John Tiranti & Co.). Correct price is 3s.

THE SOCIETY OF ARCHITECTS.

WE take the following notes from the minutes of the Society of Architects:—

Registration.—On the invitation of the Council of the R.I.B.A., the Council of the Society has appointed representatives to resume negotiations with members of the Institute Council on the subject of Registration. Conferences between the parties are proceeding.

"*Architecture.*"—Developments are contemplated in this journal, which it is anticipated will still further increase its value and interest to all concerned. The Council has arranged to place the distribution and sales of the journal in the hands of a publisher.

Arbitration Tribunal.—The Council of the Society has appointed an Arbitration Committee available for reference to arbitration (*a*) by consent out of Court, and (*b*) by reference under an order of the Court, concerning matters in dispute affecting or connected with (1) the profession of architecture, and (2) the building and allied industries.

The Committee is constituted at present as follows: E. J. Partridge, P.S.A., F.S.I.; Major E. C. P. Monson, P.P.S.A., F.R.I.B.A., F.S.Arc.; E. J. Sadgrove, P.P.S.A., F.R.I.B.A., F.S.Arc.; A. J. Taylor, V.P.S.A., F.S.Arc. (Bath); and John Knight, M.S.A. (Manchester). The Registrar of the Committee is Major W. E. Watson, F.R.I.B.A., barrister-at-law.

Board of Professional Defence.—Major Harry Barnes, V.P.R.I.B.A., and Major W. E. Watson, F.R.I.B.A., barrister-at-law, have accepted the Council's invitation to serve on the Society's Board of Professional Defence.

Education.—As a result of reports and recommendations received from various Committees dealing with educational matters, the Council have made such revisions to the Society's regulations relating to examinations, scholarship competitions, and design courses, as will increase their scope and privileges, and remove restrictions other than those necessary for their proper conduct, thus enabling them to be carried on with greater benefit and advantages to all concerned.

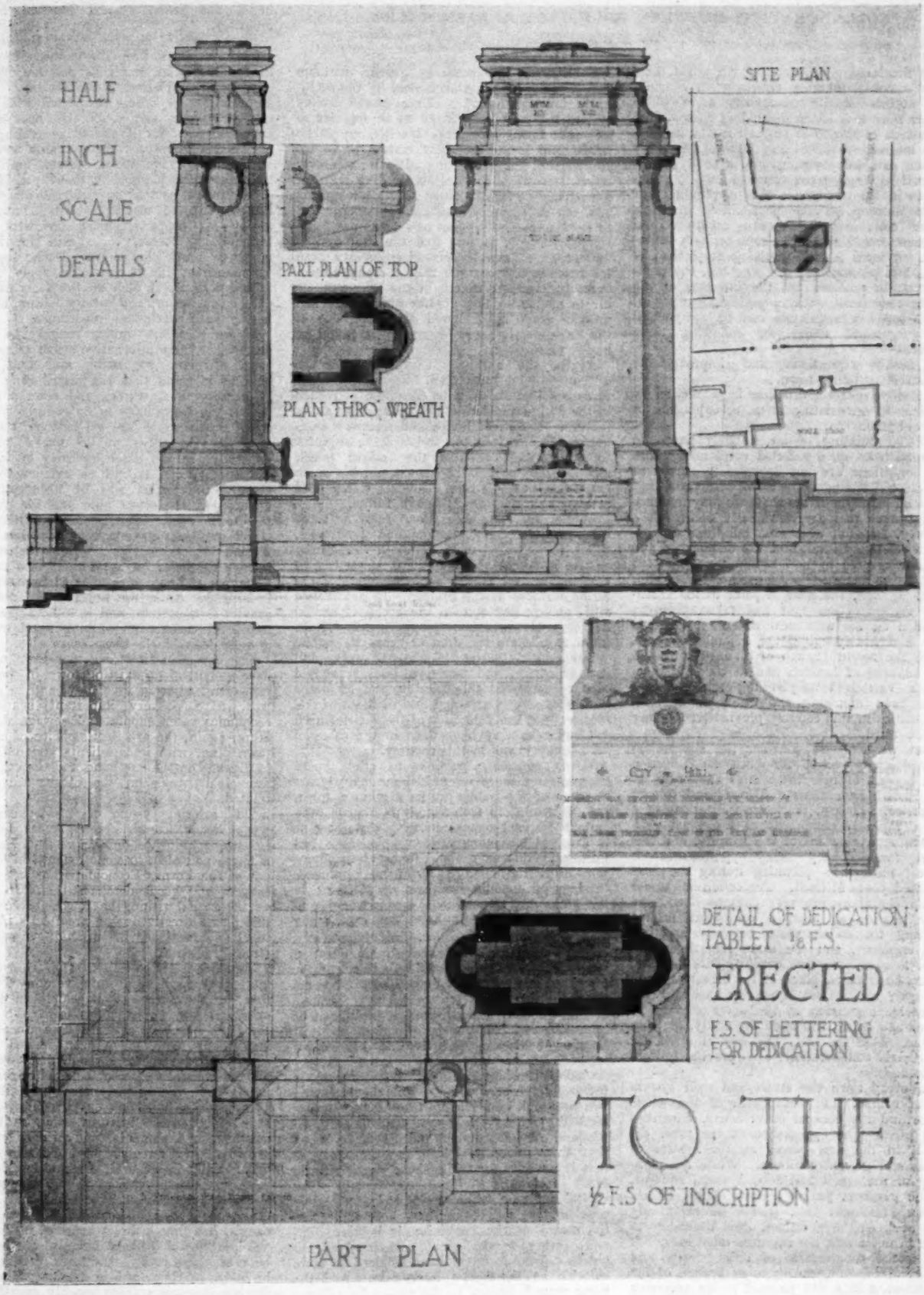
THE PRODUCTION OF ART.

THOUGH an important exhibition in itself, the occasion of the opening of the Aberdeen Artists' Society Exhibition was made unusually so by the speech of Mr. Macgillivray, LL.D., R.S.A. (His Majesty's Sculptor for Scotland), who made a strong protest against the usurpation of the "machine," and declared that the creative artist—the poet, painter, sculptor and musician—was the last defender of humanity against the ever-growing incubus of machinery. He has much to say as to the fostering of the art schools, from which we quote the following:—

"What has happened since 1870? It would take too long even to glance at antecedents. Let us look at things as they are. Art is upon the town—everybody knows her. Great sums are spent by the nation on huge art schools—hot-house caravanserais, where all the arts and crafts meet, and where emulation is unduly provoked by medals and money prizes; and where, after a term of five years or so, diplomaed youngsters are turned out, who paint pictures and model statues and busts almost by recipe, and often in a way so fair as to startle with likeness to the real thing; but, like the plucked poppy, they have only to be taken home to fade for lack of that something of the Psyche which holds indefinitely. Yes—art is upon the town in an endless variety of manifestations from blatant posters to chocolate box lids. It has become boring and, in some cases, as nauseous as sugar would be if put into every dish at mealtime. An eternal round of patisserie, as against sound bread and meat or plain cakes and ale. I'm afraid I have little sympathy with the art school training for the arts we are thinking of. In the days of the great ones—Pheidias and Apelles, Michael Angelo and Da Vinci, Rembrandt and Velasquez, Reynolds and Raeburn, Turner and Constable, Rodin, Whistler and Beardsley, there were no such caravanserais as I have been tilting at.

"Art dealers—those immaculate exponents of veracity—those money changers in the vestibule of the temple, tell me that pictures are as 'a drug in the market,' and that 'sculpture is an art without an audience!' and I feel obliged to believe them, because I know they must know, and because I believe, in the case of pictures, anyhow, there cannot be in all the wide world so many real artists as would fill all the exhibitions now in being, to say nothing of the tiresome thousands rejected by the weary selecting committees, who, as the streams of futilities pass, fasten upon a bit of the real thing, as hungry men do on a morsel of food, and, as I have seen, clap their hands with delight over the finding.

"If it be true that works of art are to-day a 'drug in the market,' the converse must be that there is apathy among the people towards such manifestations, or that a flood of the spurious has inundated the good, the true, and the beautiful. 'In former times,' says Rabindranath Tagore, the Indian seer of the day, 'the intellectual and spiritual powers of this earth upheld their dignity of independence and were not giddily rocked on the tides of the money market. But, as in the last fatal stages of disease, this fatal influence of money has got into our brain and affected our heart.'"



Lull Cenotaph Competition.

Second Premiated Design: By MESSRS. H. G. HALL and R. G. COX.

[The first premiated design in this competition, by Mr. F. H. Hughes, A.R.I.B.A., was given in our issue for August 31.]

TOWN PLANNING.

COLLABORATION BETWEEN ARCHITECT AND ENGINEER.

By T. W. MACALPINE.

In the leading countries of the world there is a steadily growing tendency to consider the welfare of the community as a whole rather than that of the individual citizen. One indication of this is to be seen in the increasing interest that is now shown in every branch of town planning, and even in small, as well as large, reconstructions and improvements in old towns. If this corporate effort is to develop all the possibilities in it, a closer collaboration between architect and engineer would appear to be a primary condition. A town is mainly the joint product of these two professions, and to obtain the highest results possible in the interests of the public they must work in practical sympathy.

All town developments can be comprehensively grouped under the following three heads:—

1. Small alterations and improvements within an existing town.

2. Extensive reconstruction in a section or sections of an existing town, or expansion in the suburbs.

3. The building of an entirely new and planned town on a selected rural area where the conditions are not appreciably hampered by older buildings.

As an example of the first, we may instance the changes that are continually taking place in, say, London, where old buildings occupying a relatively small area are demolished and the site covered by new buildings, or adapted to other purposes. In the case of the second, it is, perhaps, sufficient to point to the extensive reconstruction that has taken place in London on the area now covered by Kingsway and Aldwych and the adjoining streets, or to the recent growth of planned towns in the suburbs of London and in the Midlands.

The various town-planning schemes that have been engaging the attention of local authorities in this country provide an instance of the third.

But we can also consider the almost unlimited opportunities for both the selection and lay-out of new town sites that exist in the British Dominions and in several foreign countries. To-day, there are indications of a more rapid development of the great self-governing Dominions of the Empire, and this must furnish very many opportunities for almost ideal town planning during the next hundred years at least. The conditions under group (1) above are very circumscribed, and they provide at most a somewhat limited opening for collaboration between architect and engineer, and the same remark applies even to such extensive developments as those which have taken place in the Kingsway and Aldwych area. But when we consider the extensive expansion in the outer suburbs of towns and cities, and more especially, the conditions noted in (3), the opportunities for beneficial collaboration are practically unlimited.

In every town the street and road system is, of course, the groundwork of the whole plan, and the general convenience, amenities and picturesque appearance of the town depend, in the first place, on the system of roads and ground contours. While the planning of the street and road system, squares, public gardens, parks, houses, shops, offices, public buildings, etc., should be essentially the work of the architect, it is necessary to bear in mind that the engineer must carry out the actual construction of these streets and roads. Moreover, one or other branch of the engineering side will proceed to lay tramway rails and erect standards to carry the overhead trolley wire system, telephone and telegraph posts and wires, and street lamp standards.

It is clear that the tramway system, in so far as power costs for operation are concerned, can be much influenced by ground contours and street gradients and, hence, by the architect's town planning. The overhead trolley system has now been found to be superior to all other forms of electric traction on public roads, and it is practically certain to be installed in preponderating degree wherever street tramways are required. But there is not sufficient reason against running telephone and telegraph wires and cables underground in towns, especially when new roads are being constructed. It is true that the first cost of underground lines is somewhat greater than for overhead wires, but it has many advantages in practice, which, in the long run, go far to neutralise this greater outlay. If this practice could be followed generally, one of the unsightly features of our towns would be finally eliminated.

Again, the architect, enthusiastic for the æsthetics of his town plan, has surely a right to expect that he shall be consulted in regard to the design and location of those other street features—the street lamps and tramway standards. It also falls to the lot of the engineer to design and construct the bridges (steel, stone, brick or reinforced concrete) which carry railways, roads, canals, water and sewage conduit pipes, through towns.

While the engineer must design these structures to meet the required conditions, there is everything to be gained by entrusting to the architect the decorative treatment of the approaches, roads, parapets, and all exterior surfaces of the bridges. In accordance with present-day opinion the architect should be empowered, when preparing the town plan, to allocate the area or areas for public works (electric power stations, gas, water, and sewage works) and factories. But he should also be consulted in regard to the buildings and other structures comprised in these works, etc., so that the amenities of the district need not suffer as they have done in the cases of very many towns in this country.

It is generally possible to allot space adequate for the development for many years to come of the public works serving a town, but, in regard to factories, it is always difficult to forecast expansion with certainty, as it involves too many unforseeable trade factors; and this fact alone, apart from questions of district amenities, is of great influence in determining the locations of factories in the outer environs of new towns where congestion is unlikely to arise for very many years.

The economic importance of this question can hardly be over-estimated. In this country, for example, very many factories have become closely surrounded by property in the course of time, and, in consequence, it is difficult or impossible to enlarge the premises to meet growing business; work is thus carried on less efficiently. Sometimes a second factory is built elsewhere, or the whole concern is removed to a new site. But the economic wastage and loss arising from cases of this kind throughout the length and breadth of the land are incalculable, and it is to be hoped that town planning, with the opportunities that it provides for taking long views, will do much to improve these conditions. The capital sunk in public works and factories is considerable, and if they have been laid down haphazard at the beginning it is very difficult, owing to the great cost involved, to obtain powers to have them removed to more suitable locations at a later date. And the same remark applies to the routes for railway tracks in a town.

The electricity, gas, water and sewage systems all fall within the province of the engineer, and the most economical lay-out of mains to meet the present and probable future requirements of the town for a determined number of years must be left to him. The engineer should, of course, lay these mains under the street system planned by the architect.

In the case of electric supply, the engineer always desires to keep the quantity of copper in the mains as small as possible, for this appreciably influences capital outlay. Transmission loss is closely connected with quantity of copper, and it is also necessary to keep this low, for it affects generating costs of electric supply. These mains must, of course, follow the street system, and if the latter can be planned without prejudice to other factors, so that an electrical distribution can be ensured which involves a minimum outlay for copper, consistently with small transmission losses, there will follow permanently lower charges for electric supply.

Somewhat similar remarks apply to the influence of street plan on the sizes and lay-out of gas, water, and sewage mains, but this matter is of much less importance.

If we take the trouble roughly to sketch out two or three alternative street plans for a town of given population and area, then, bearing in mind that the distributing mains (electricity, gas, water) and sewage system within the town have to be connected to the trunk mains which are led between the town and the respective public works situated, generally, in the outer environs or in more remote districts, it will be evident that the size of the mains will be appreciably influenced by the street plan and the shape of the town area. The ground contours and street gradients have a very considerable influence on economical water service and sewage carriage, for the former is a pressure system, and hence it is affected by differences in altitude, while the latter is, of course, a gravity flow system, and it follows that close collaboration between architect and engineer is very desirable in these cases also.

The choice of site for a new town and the development of an existing town in the direction of an adjacent area may, and in general will, have a very important bearing on economic water supply and sewage disposal. Here, again, the architect's choice of site and town plan, with its gradients and differences of altitude on the one hand and the engineer's municipal works on the other, are closely related.

The arterial system of the locality—railways, roads, canals, rivers—must have an important influence on the choice of site for a town, and also, to some extent, on the lay-out of the town. Economic transport of passengers and goods demands this. In so far as the roads within the town are concerned this bears directly on the architect's planning in its connection with ground contours and street gradients.

Two cases may arise: (1) The arterial system of roads and railways may be built first, for the purpose of developing a district; or (2) it may be laid down after the site of the town has been chosen. The amenities of very many towns have been spoiled by ill-chosen railway routes through the town, with all the embankments, cuttings, bridges, and, in addition, the smoke, noise, and vibration. If a town is built on very irregular ground, then objectionable features, such as railway cuttings, embankments, and bridges carrying railways over streets and streets over railways, will, in general, be multiplied. The relation between choice of site for a town and street plan on the one hand, and, on the other, the choice of routes for railways and canals, has thus a direct bearing, not only on the locations of bridges, but also on the numbers of these costly structures that have to be built. A river, and in some cases a canal, flowing through a town usually provides one of the greatest opportunities for decorative landscape treatment in respect of the embankments and boulevards which can be laid out along its sides. And, if for no other reason, the railway tracks in a town should not run by the sides of rivers. Engineers prospecting

for railways always take particular note of rivers, for a sluggish stream generally indicates easy gradients in its proximity, hence the reason for railway tracks being found so frequently by the sides of rivers and canals. The water supply, sewage disposal, and the road system are all largely dependent on the terrain of the whole district; and the latter has, in respect of these points, an important bearing on town planning.

There are many materials employed by both engineers and architects—varieties of building stones, timbers, cast-iron columns, rolled-steel joists, concrete, reinforced concrete, etc. The British Engineering Standards Association carries out research work and testing on some of these materials, for the purpose of preparing specifications suitable for the most general practical applications. But a large amount of research remains to be done, especially on building stones and timbers, and there seems to be no good reason why architects and engineers should not combine in this work for their mutual benefit and to prevent overlapping and waste of labour and expense.

The architectural and engineering institutions could do very much to bring about a closer working union between these two professions. By means of joint meetings, at which papers would be read and discussions follow, it should be possible to show that, in their own interests and in that of the community at large, co-operation is very necessary.

EXHIBITION NOTES.

THE FINE ART SOCIETY.

It would be worth going to the Fine Art Galleries to see the "Clouds on the Hills—Como," one of the most delightful of Arnold Priestman's drawings now on view; it is an admirable study of tone and colour. Other drawings which reach a very high level of achievement are 38, 44, 48, 10, 20, 28, and 26. The most impressive and completely satisfying of drawings have a breadth of treatment which in some cases makes almost a monochrome. Take Nos. 28 and 10 in this exhibition and it will be seen that the prevailing colour is a quiet green modified by brown and yellow. They are both fine drawings. We certainly do not like

Silver Lamp Standard.
By GEORG JENSEN.

the rest of the drawings so well as those we have named, but this artist can be placid and broad as well as lively in his treatment, but at his best he is in the front rank.

One can hardly venture to say anything critical about the beautiful paintings by Fred Hall; one cannot even complain that they are monotonously pleasing. On the contrary, there are all sorts of effects of colour and light—animals, buildings, fields and sky may each in turn be the special charm. Where sky appears at all it is an integral and vital part of the picture; it may be a suffused glow of colour, or overhung with grey clouds, or just a luminous background for floating cumuli, or a grey veil with lingering wisps of cloud, but it is always an essential part of the picture. Altogether this is a very strong show.

At these galleries is also to be seen an exhibition of silversmiths' work by Georg Jensen. The

Silver Wine Cooler.
By GEORG JENSEN.

work of this celebrated craftsman has already been referred to in our pages. He knows the value of surfaces, of texture, and of how ornament may give distinction. Besides this, the general shapes of his pieces are such as strongly appeal to the architect. Silver is a beautiful metal, but nowhere has it been more vulgarised than in the ordinary commercial life of England.

OLD DUTCH TILES.

It is satisfactory to know that the Vis collection of old Dutch tiles, due to a generous benefactor, has been presented to the Victoria and Albert Museum. The collection is now arranged in Room 141 on the second floor of the Museum, and was opened to the public on December 1. Mr. Bernard Rackham has written a guide to the collection, which will shortly be available to the public. These tiles date from the seventeenth and eighteenth centuries, and are very representative of an art which has in the past conferred beauty on many an English home and is associated with English domestic work. We recall the now vanished but beautiful example of this use of the Dutch tiles in the Dairy of Ravenscourt Park, Hammersmith, now the Public Library, the walls lined throughout with beautiful tiles of this period, which we recall to have seen being removed at the time, by the pickaxes of the housebreakers when the dairy was unfortunately demolished. It is agreeable to think that such a vandalism is hardly possible to-day, and that we have a better sense of values than to destroy such historical and beautiful records. The history of this tile-making, often the work of local industries and forming an occupation for the winter in the countryside, may remind us of the value of an education which should fit the agriculturist and the country dweller to occupy his spare winter hours in craft work of perhaps a like kind, whereby the value of the hand and brain in a freedom from factory methods, could restore to us something of the quaint charm and treatment of work done in such a way. And the education required is as much that of the heart as the brain; in restoring to the individual the quietness of mind free from the need of unsatisfying excitement to express the best things in his own way.

INVENTIVE GREEK BUILDERS.

IN his third lecture on ancient Greek architecture, at the Central School of Arts and Crafts, recently, Sir Banister Fletcher said the origin and evolution of the Doric Order of Greek architecture was a tale in terms of architecture of the colonising activities of the Greeks in the sixth and fifth centuries B.C. Dorian to the west and Ionian to the east, they evolved both native and colonial types of architecture. The Dorian colonies in Italy and Sicily afforded remarkable examples of the character of a people expressed in its building, for the Doric temples, as could be seen to-day in the majesty of ruin, were grave, severe, and sturdy, like the Dorians themselves. Trading, colonising, building, inventing, they exhibited each successive phase of activity, and might be said to have invented the "orders of architecture," or systematised designs for the supporting column and supported entablature, which they used for the building of their temples. Lantern views of temple ruins at Paestum, Selinus, Corinth, and Athens, showed the use, dating back to 700 B.C., of the Doric or earliest and sturdiest order, which, like the other orders, had been used in all centuries down to the imposing entrance to the Euston Station of the present day. The lecturer discussed the probabilities as to the origin of the Doric order. Had it a lithic or a wooden prototype? Was it to be referred to the Egyptian rock-cut tombs of Beni Hasan or to the prodomos of the wooden hut? All we knew was that the builders found certain forms which suited their ideas and needs, and that they used them in combination and in one common material, the result being a perfection of form which was still recognised as a thing of beauty and a joy for ever.

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

Election of Members.

THE following new members were elected at a meeting of the Royal Institute of British Architects, held at No. 9, Conduit-street, W., on December 3:—

AS FELLOWS.

J. Allner, Poole.
A. R. Conder, Crouch End.
G. Drysdale, London.
E. C. Francis, Chepstow.
W. H. Godwin, Kidderminster.
F. H. Greenaway, London.
H.W. Hatchard-Smith, Epsom.
P. D. Hepworth, London.
O. Hill, London.
H. Hutt, Reading.
J. H. Markham, Harrow.
C. J. Marshall, Cheam.
A. R. Mayston, Finchley.
R. H. Morton, South Shields.
J. E. Newberry, Bedford Park.
W. G. Newton, London
A. Sharp, Toronto.
L. S. Sullivan, Wimbledon.
G. Unsworth, Petersfield.
G. C. Wilson, Hendon.
D. Wood, Stanmore.

AS ASSOCIATES.

T.M. Alexander, Liverpool.
H. F. Billimoria, Colombo.
K. E. Black, Highgate.
S. N. Buchia, Bombay.
S. P. Bush, Rangoon.
R. J. B. Clark, Penzance.
H. A. Clist, London.
A. E. Davidson, Toronto.
C. C. Deuchar, Pretoria
W. Doddington, New Cross.
W. H. Eales, Victoria.
S. W. Fearn, Wellington.
L. R. Foreman, Brighton.
L. W. Hall, Watford.
F. L. Halliday, Manchester.
V. P. Haughton, Wellington.
S. D. Igglesden, Hampstead.
R. J. Masey, Anerley.
A. J. May, Bristol.
T. W. Milligan, Cape Town.
J. A. C. Moffat, Durban
S. G. Monk, London.
A. D. Parhar, Colombo.
R. A. Riding, Earl's Court.
W. Ross, Glasgow.
J. E. Sterrett, Walthamstow.
S. Toy, London.
W. H. Trengrove, Christchurch.
H. A. H. Walker, Pretoria.
J. G. Wilson, Pretoria.

AS HON. FELLOW.

The Right Hon. Viscount Burnham.

AS HON. ASSOCIATE.

Sir Frederic George Kenyon (Director and Principal Librarian at the British Museum).

THE BUILDING TRADE.

THE COST OF BUILDING.

By T. P. BENNETT, F.R.I.B.A., Hon. F.I.O.B.

THE detailed examination of the result of *The Builder* Cost of Building Competition must begin with an examination of the designs.

The winning designs for Types "A" and "B" have been subjected to an analysis and compared with economical detached houses recently erected, with the following result:—

House No. 1. Lowest tender, less contingencies.	House No. 2. Lowest tender, less contingencies.	Cottage Type "A." Prize-winning tender, less contingencies.	Cottage Type "B." Prize-winning tender, less contingencies.
£1,590	£926	£1,187 16 8 per pair, say £593 18 4 each.	£1,555 10 7 per pair, say £777 15 3½ each.

All figures given below are for one house in each case.

	House No. 1.	House No. 2.	Cottage Type "A."	Cottage Type "B."
Floor areas inside main walls	1,653	1,244	1,051	1,364
Cost per ft. super of floor area.. ..	19/2¾d.	14/10½d.	11/4¾d.	11/5¾d.
Cubic contents outside main walls ..	25,623	17,258	12,250	17,893
Cost per cubic ft.	1/2·8d.	1/0·86d.	11·74d.	10·5d.
Per cent. cubic contents to floor areas..	1,488	1,357	1,165·5	1,311·8
Area of hall and passages and stairs, measured twice	188	103	140	178
Per cent. area of hall, passages and stairs to floor area	11·37	8·3	13·32	13·05
Roof area measured flat, allowing 1 ft. projection to eaves	1,110	833	692	914
Per cent. roof area to floor area ..	67·15	67	65·84	67·01
Length of external wall, including half party wall	125	117	87	119
Per cent. length of wall to floor area ..	7·56	9·5	8·28	8·72
Area of external wall surface	2,896	2,172	1,232	1,672
Per cent. external wall surface to floor area	175·2	174	117·2	122·5

Note.—House No. 1 included central heating with radiators in all rooms.

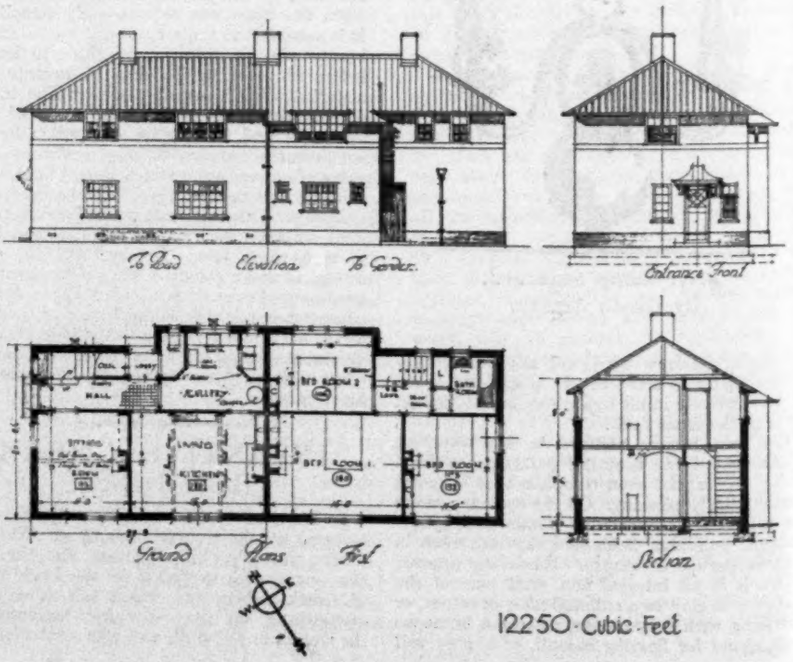
From this information it may safely be inferred that the designs in themselves are well and economically planned, and that the lowest tender is below rather than above the rates that are ruling. In other words, there is every evidence that an economical design has been awarded the prize in each case, and that the tenders have been cut to the lowest possible figure according to the demands of the design and specification.

As the ultimate purpose of the competition is to endeavour to indicate the way in which the cheapest possible houses can be obtained, the point is of great importance and immediately suggests an examination of the accommodation provided. The rooms in the winning design, Type "A," include a living room, scullery, sitting-room and three bedrooms, and the cost, according to the winning tender, amounts to £1,187 16s. 8d. per pair, or approximately £595 per house. This figure of £595 for a working man is high, and might, in the first instance, be substantially reduced if the scullery were omitted and the sink placed in the living room. With a corresponding reduction in the area of the bedrooms such an arrangement would represent a saving of about £60. Whether the working man tenant would be satisfied with such reduced accommodation or not is a matter for investigation in each district, but the possibility of such a reduction must be written down as of distinct importance, and one of the points which the competition emphasises. It is possible that a further amount of £10 to £20 might be effected by a cheese-paring process in connection with the size of the rooms, and this means of lowering cost would have to be considered in every instance.

Type "B" houses are not altogether in the same category as "A" because they represent an attempt to cater for a man who is able to pay for something that is above the minimum, and the question of how much the accommodation may be raised above the minimum is a difficult question. It may safely be said, however, that in this case the kitchen and scullery could be combined with less real loss to the amenities of the house than in the case of the omission of the scullery in Type "A." Such an amalgamation would probably mean a saving of approximately £30, while a reduction in the size of the sitting-room and cheese-paring elsewhere might save a further £18. This amount on the total cost of £777 is not great, and the four bedroom house with its two sitting-rooms, kitchen and scullery still costs about £730, which is quite a substantial, although by no means excessive, figure. The further investigation proceeds upon these lines the more it is shown that the prize-winning houses are well planned, that they thoroughly deserve the distinction of their leading places, and that they are houses such as might be reasonably demanded in a normal district with an ordinary clerical and working-class population of a good type.

The specification embodied in the bills of quantities issued for the second part of the competition indicates a high grade of work. In fact, it is a closer approximation to the ideals of building than is usually possible when building takes place for commercial purposes. Some of the items which call for enumeration in this respect are reinforced concrete lintols, white-glazed ¾ channel pipes in the manholes, cement rendering to the manholes, bitumen damp course, granolithic hearths, boarded roofs covered with inodorous felt, rebated floor boards, and lino covering on cement floors. In the "Joiner" it must be noted that all sashes have oak sills and the doors oak thresholds, the pipes are supported on pipe grounds, and there is a well-fitted dresser. In the "Plasterer" rounded angles to walls and to reveals and soffits of windows have a first coat gauged in cement. All flashings in the "Plumber" are in lead; there are lead pipes for the water services underground; there is a 5 ft. 6 in. bath and even a dust-bin. Finally, all outside woodwork is painted. No one will deny the advisability of the above work and it can hardly be called extravagant, yet in a search for houses which can be erected to meet the purchasing power of men with little if any capital, these are the items which have to be seriously considered if economy in its strictest sense is of primary importance. In the "B" houses the same high standard of finish is demanded, and there are here and there items of a simple decorative character which add to the cost.

These comments upon the specification may sound hypercritical, but there is no intention that they shall be construed as mere meticulous statements. The cost of houses has risen greatly, the standard of accommodation has gone up so much that only by the exercise of



Type "A" House.

the strictest possible economy in small and in large items can the modern housing expert hope to erect houses which, if built to sell, are within the means of possible purchasers, and if built by housing societies, municipal authorities, or other philanthropic institutions, can be regarded as a serious and economic contribution to the relief of the housing shortage. These prices of *The Builder* competition are, therefore, for houses which, in themselves, are well planned and designed with reasonable economy, the workmanship and finish according to the specification are to be of a high standard, and the price of £595 for Type "A" and £777 for Type "B" must be accepted as the lowest possible price at which houses of this type can be built. To obtain a cheaper house (*a*) the accommodation must be reduced; (*b*) the standard of finish must be lowered; (*c*) other and less satisfactory systems of construction must be employed.

The next point of importance is to ascertain whether there is any marked economy in country districts or in any specified area, or whether the cost of building is approximately the same all over the country. It is safe to assume that the average architect or builder imagines that building is much more expensive in London and the large provincial towns than elsewhere, but the result of the competition does not at all bear out such an assumption. The twelve lowest tenders starting from the bottom were submitted by builders working in Swannington, Coventry, Witham, Lowestoft, Exhall, Darlington, Wolverhampton, Willingham, Newcastle-on-Tyne (2), Ely and London. The twelve highest starting from the top were submitted from Boston, Newport Pagnall, Cowes, Llanelly, Brockenhurst, Hampton-on-Thames, Chelsea, London (2), Bristol, Newcastle-on-Tyne, Orpington. Thus the curious anomaly comes to light of the inclusion of builders from the same town amongst the highest and lowest tenders, while the highest tender of all comes from a comparatively small town in an agricultural district. As there are upwards of 175 competitors, the competition conclusively proves that, given equal conditions, it is no dearer to build in a large town than it is in a country district, and that the cost of building has reached a fair average for the whole of the country. It is questionable whether this statement would be true if cottages were built having similar accommodation but constructed with local materials, and in order to ascertain the extent of local variations in cost and customs a questionnaire has been sent to 30 or more competitors. Competitors who do not receive a special request are again asked to supply full local information, as the point is undoubtedly of great importance. The competition next brought to light an extraordinary number of clerical errors in the tenders submitted. Even the best tenders were not free from this fault, while some of the others had extraordinary discrepancies. Taken at random, one tender had 28 clerical errors, increasing the total by £32. Another had 17 errors, making a difference of £9. In some cases the addition was at fault, and one competitor had sent in a tender with a mistake of £161 against himself, while others omitted sums of £35 and £30 respectively.

Carelessness in tendering is familiar to all, but the number of errors shown in these tenders seems to indicate so great a margin of error that, if it is carried into every-day practice, builders must constantly find that they lose work unnecessarily or are at times greatly inconvenienced or even faced with serious loss as a result of the slackness of office staff. Two competitors failed to price the bills of quantities, and sent in merely a lump sum, thus making detailed examination impossible. Next week a graph will be given showing the prices and tenders received, together with an analysis of the actual prices.

CHAPEL AND MEMORIAL SCHOOL AT REDHILL.

The Chapel.

THIS new building, which takes the place of the old prayer room—a temporary structure burnt down in 1922—is of plain design, in keeping with the surrounding buildings. It has been placed on the west side of the main buildings, and will form what is, in effect, the west side of a quadrangle.

The buildings, which are of substantial brick-work, tiled with hard Staffordshire tiles, are roughly oblong in plan, and comprise chapel, ante-room, cloak room, and lavatory. The main building, the chapel (34 ft. by 28 ft.), faces west, having on its south side a paved terrace from which the children can be watched at their sports, and on the north and east sides tiled verandahs (whose roofs are supported by massive posts and struts), which it is intended shall be used for convalescent children.

The external walls are covered with roughcast, the outside doors being of oak treated with oil, the oak posts of the verandah being stained and varnished. No elaborate decoration has been used on the interior; this being adapted for further decoration at any future date if desired. The interior wood-work is of oak; the wood block floors and dado being oiled; and the seating, which is of pleasing design, varnished. The windows are filled with steel casements containing leaded cathedral glass. The building is fitted throughout with electric light. A bronze tablet has been erected at one side of the platform to the memory of the "Old Boys" who gave their lives in the war.

The work has been carried out by the following firms: General contractors, Messrs. H. Bacon & Son, Coulsdon; constructional steel work, Mr. G. Banbury, Croydon; ironmongery and presentation keys, Messrs. J. Gibbons, Ltd., London; flooring, The Acme Flooring Co., Ltd., London; anthracite stove, The London Warming and Ventilating Co., Ltd., London; electric lighting, Messrs. Tamplin & Makovski, Reigate seating, Messrs. G. M. Hammer & Co., Ltd.; London; steel casements and leaded glass, The Morris Westminster Metal Works, London

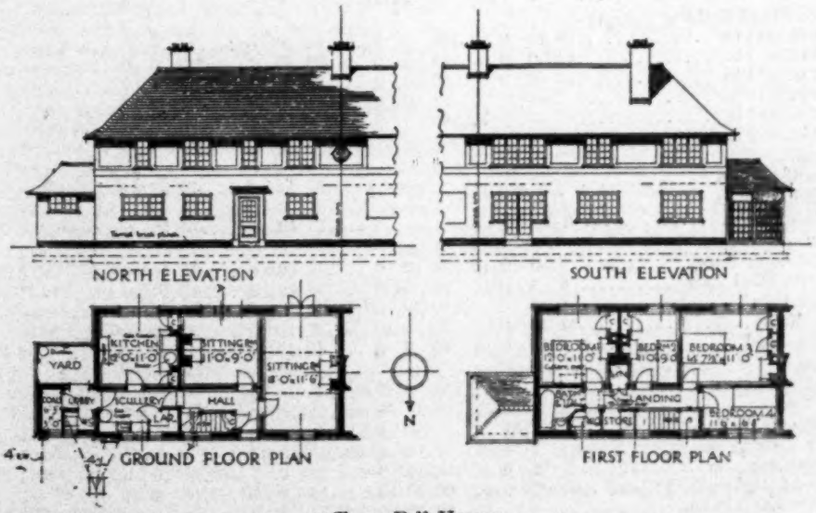
Victory Memorial School.

This building has been remodelled, the plans being first approved of by the Education Department.

The ground floor contains a large hall, from which access is obtained to five good class rooms, master's room, cloak room, &c. The basement floor contains a cooking instruction room, scullery, pantry, cellars, cloak rooms, &c. On the first floor there is the master's house; and on the second floor, sewing rooms and further class rooms. All the work has been carried out by Messrs. H. Bacon & Son, Coulsdon, with the exception of the electric lighting, which was carried out by Messrs. C. Cooper & Co., Ltd., London.

The chapel and the alterations to the Victory Memorial School have been designed and supervised by Mr. J. A. Souttar, architect, 15, Upper Wimpole-street, London, W. 1.

Presentation keys used by H.R.H. the Prince of Wales at the opening of the Victory Memorial School and new Provincial Police Orphanage Chapel, Redhill, were manufactured by James Gibbons, Ltd., Wolverhampton, under the direction of Mr. J. A. Souttar, architect.



"Type B" House.

MODERN STEAM HEATING.

MR. A. J. Assheton, at the meeting of the Institution of Heating and Ventilating Engineers, held at the Engineers' Club, W.C., appealed to his hearers to be fair in their reflections, and not to confuse the early faltering stages in steam heating with the much advanced methods of to-day. He remarked that it should not be classed as a cheap make-shift; it deserved the same engineering skill and study as was paid to other branches of the heating profession. The use of steam as a heating medium was frequently adversely criticised; it was said that the temperature of steam was too intense for direct heating purposes and affected the air. This was one of the minor defects of central heating, but the result would be the same irrespective of the heating medium used. In parts of America and al .f Canada it would be impossible to exist without heating of some kind; but in Great Britain the climate was not so severe, and it would be possible to exist without heating engineers. However, the growth of the heating industry had proved that the many advantages of central heating more than compensated for any slight defects. Many critics held that low pressure steam radiators decomposed air impurities, and it was true that unless cleaned there was an odour. Ventilation, however, would soon remove the odours, and the blame was not on the heating system so much as on the person responsible for the cleaning of the radiators.

Paving Works at Plymouth.

Plymouth Corporation Works Committee on Tuesday received from the Unemployment Grants Committee a promise of a 65 per cent. grant in connection with its scheme for re-paving fifteen of the streets of the town, at a cost of £22,870, in order to provide winter work for the unemployed. It was decided to put the work in hand immediately.

THE LAKE IN ST. JAMES'S PARK—PAST AND PRESENT.

THE lately-reported leakage in the new concrete bottom of the ornamental water in St. James's Park naturally attracted considerable attention. It now appears from the official statement published in the Press that no occasion exists for anxiety, as everything is made all right and the leakage has been stopped. The old concrete bottom served, we believe, for nearly a hundred years with an occasional patch or two or periodical repair. In connection with this 1827-9 work it will be remembered that Aspdin, the bricklayer, patented his invention of Portland cement in 1824.

St. James's Park was a bare, undrained and comparatively swampy field comprising about 87 acres when Henry VIII enclosed it. The name of "St. James's Park" appeared first in 1539. The property belonged to the Leper Hospital, which stood on the site of St. James's Palace. Some attempt was made during the days of the Tudors to give the property some befitting amenities by utilising the ponds and water-courses. Queen Elizabeth, for instance, kept a lot of waterfowl and replenished and improved their habitable conditions, though her enterprise fell far short of the "brave alterations" carried out by Charles II on his return to London, bringing from his exile enlightened views imbued with Dutch taste for gardening. He employed Le Notre, the architect of the groves and grottos at Versailles, and Dr. Morison became the monarch's chief adviser. The result is well known. The Park of St. James's was laid out with a long, straight canal, with regular avenues of elms and limes stretching away from the Horse Guards Parade, with Buckingham House in the distance. The water-colour by J. Maurer illustrates this accomplishment. Pepys tells, under date of September, 1660, how he extended his walk from "Pell-Mell" to "see how they had proceeded in making a river through St. James's Park which I had never seen since it was begun." The king had thrown several ponds into one. There were also many surface waters existing before then. The further evidence recorded by Pepys is important. He "observed with the greatest pleasure several engines at work to draw up water," and "above all the rest" he "liked best" the invention by which Ralph Greatorex carried up the water at the angle of 45 deg. with "a great deal of ease," showing the abundance of the underground supply at that time.

There has always been a superabundance of water in St. James's Park. "Spring Gardens," at the northern extremity, suggests this, and a fountain hard by was fed therefrom. "Rosamund Lake," pictured by Hogarth and mentioned by Pope, made a favourite feature in the south corner of this Royal estate near the Queen's Palace, then called "Buckingham House." This structure figures in many old paintings probably, but a well-known print by S. Miller shows in a reliable way the original front of what ultimately became incorporated with Buckingham Palace. The Rosamund pond was afterwards called "a lake," filled up in 1770. George IV showed a degenerate taste for art and transmogrified what the Stuarts had accomplished in St. James's Park when he modernised both the water and walks, though some remnants of the picturesque remained and were incorporated, according to current fashion in landscape gardening, which was further developed during the Victorian era. Paths were made "winding and twisting," ensuring cosy and convenient rural retreats or "dead ends," warranting the title of Wycherley's comedy, "Love in the Wood; or, St. James's Park."

Canova, the celebrated architectural artist, whose topographical drawings of the Thames and Westminster are so highly valued, was asked after he had been thus engaged in London some while, what struck him most in England. The artist replied, "that the trumpery Chinese bridge in St. James's Park should be the work of the Government officials and that Waterloo Bridge was the work of private enterprise." This contrast is seemingly ever recurring and the ugly iron bridge still extant over the lake, also the present hard, ugly-looking verge to the new lake bed afford further instances in point.

The immediate connection of these pertinent references about the historic condition of St. James's Park and its present ornamental water bed arise from the prevailing springs and consequent intermittent running water surcharging this district and specially the Park itself. The houses in Queen Anne's Gate (or at any rate, on the north side) are built on piles, judging from one with which the writer had to deal towards the end of the last century. About this date Victoria-street, commenced twenty-five years before that, was being completed, and at the corner of the Broadway a very tall building was erected and standing isolated as it did then, before the adjacent premises were built, it assumed the proportions of a high campanile. The owners of the site next adjoining complained that the structure had been erected out of the upright so that it intruded upon their property sufficiently to reduce appreciably the area of their plot up above. Representatives of the owners of both properties met to try the rightness or wrongness of this assertion. They used the plumb-line with differing results. Sometimes the wall was vertical and sometimes it was out of the upright. It varied so much that it was decided that the plumb-line was no use for so great a height in the open air subject to the wind. Subsequently, therefore, it was agreed to employ an independent surveyor, who should test the wall with a theodolite. Permission from the vicar of Christ Church in Victoria-street was obtained to allow a concrete platform to be fixed in the churchyard in a suitable position to thus sight the wall. The result was so indecisive and uncertain that the surveyor repeated his test over a considerable period, but with no better conclusions. Being well acquainted with Westminster, he bethought himself of some old maps which led to the investigation of a well far off at Hampstead, where he noted that when this well was full the building at Westminster heaved over, and when the well water was low this same structure became upright and normal. A spring gradually assuming the character of a stream (once more or less open, but now entirely covered in) made its way through the district near Camden Town, incidentally taking on its way farther south the old fish ponds, once associated with the Lord Mayor's garden house at the rear of Stratford-place, while in front, along Oxford-street, the Tyburn from thence turned down Bond-street and in its course became linked up with the waters from which Conduit-street got named and so travelled thus augmented southward till St. James's Park was passed and so away by Broadway across Victoria-street, when, by a left turn eastward, it reached the Thames south of the Abbey farther down clear of the site of the Houses of Parliament. Roughly, that was the surveyor's discovery, which furnished the explanation of what had happened. Consequently both the owners of the Broadway building and adjacent site cried "quits" and paid between them the fees of the surveyors as a finis to the dispute. The other buildings, being afterwards completed and wedged together, probably stand firm and do not move on the water-logged peat below, regardless of the water flow still going on.

When the already almost-forgotten Royal Aquarium was erected facing the Abbey (oppo-

COMPARISON OF PRICES OF BUILDING MATERIALS BETWEEN AUGUST 4, 1914, AND NOVEMBER 30, 1923.

Material.	Aug. 4, 1914. £ s. d.	Nov. 11, 1918. £ s. d.	Oct. 31, 1923. £ s. d.	Nov. 30, 1923. £ s. d.	Rise or Fall during Month. (Per cent.)
Bricks—					
Best Stocks	1 16 6	3 3 6	4 2 0	4 2 0	—
Flettons	1 14 0	2 7 8	2 13 3	2 13 3	—
Glazed	13 0 0	17 17 6	22 0 0	22 0 0	—
Thames Ballast	5 9	17 0	10 6	10 6	—
Thames Sand	7 3	17 0	15 6	15 6	—
Shingle (¾ in.)	—	15 0	14 0	14 0	—
Portland Cement	1 17 0	3 8 0	2 18 0	2 18 0	—
Ground Blue Lias Lime	1 0 0	2 2 6	2 13 6	2 13 6	—
Grey Stone Lime	1 8 0	2 7 0	2 10 9	2 10 9	—
Bath Stone	1 7½	1 7	2 9½	2 9½	—
Portland Stone	2 4½	2 10½	4 4	4 4	—
Good Sound Building Timber—					
4 in. × 11 in.	16 10 0	53 0 0	34 0 0	34 0 0	—
3 in. × 7 in.	13 0 0	46 0 0	26 0 0	26 0 0	—
3 in. × 11 in.	15 0 0	50 0 0	34 0 0	34 0 0	—
2 in × 11 in.	—	51 0 0	34 0 0	34 0 0	—
2 in. × 7 in.	—	46 0 0	26 0 0	26 0 0	—
3 in. × 4 in.	—	—	24 0 0	24 0 0	—
Slates—					
24 in. × 12 in.	—	—	37 12 6	37 12 6	—
22 in. × 12 in.	—	—	34 0 0	34 0 0	—
R. S. Joists	9 10 0	—	13 10 0	13 10 0	—
Iron—					
Common Bars	9 0 0	16 10 0	14 0 0	13 10 0	—3·57
Mild Steel Bars	9 5 0	21 0 0	13 10 0	12 10 0	—7·41
Steel Bars	9 5 0	19 10 0	13 10 0	13 10 0	—
Cut Nails	11 10 0	29 0 0	21 10 0	21 10 0	—
Sheet Lead	22 15 0	40 0 0	40 10 0	40 10 0	+2·47
Glass—					
15 oz. Sheet	2	7	3½	3½	—
21 oz. „	3	8	5	5	—
26 oz. „	3½	9	6	6	—
Raw Linseed Oil	2 4	8 4	3 9	4 0	+6·66
Turpentine	2 6	11 6	6 7	6 6	—1·27
Ground English White Lead	30 5 0	60 10 0	56 5 0	56 5 0	—
White Lead Paint	—	83 10 0	77 0 0	79 10 0	+3·25
Red Lead	28 10 0	47 0 0	42 0 0	43 0 0	+2·38

site the Westminster Hospital on the site now occupied by the Wesleyan Memorial Hall) the enormous reservoir provided under the building to hold sea water soon went wrong. It was rendered inside throughout with asphalte to make it efficient as a container. The continuous soakage through the crown of the arch, however, caused the asphalte on its intrados to fall off from end to end above the normal top line of the sea water. This damage was due to the prevailing overplus of the land water. Below that level the weight of sea water kept the asphalte in position, though as the contents varied in bulk from day to day to supply the fish tank requirements, the asphalted surface towards the maximum line became correspondinglyu nreliable, and deteriorated by soakage and continued to blister off until the keeping of fish had to be abandoned. This happened years before the premises were demolished.

These incidents are important in regard to the lake bed in St. James's Park, and it may exercise its influence upon the new work done by the Office of Works. When the water was taken out of the Hanoverian basin on which the war-time huts were built, the upward pressure of this land water probably disturbed the old concrete bed precisely as it heaved up "the tower" at the corner of Victoria-street as above described. When the lake was full the weight lessened the water pressure from below and the water above also solidified the old concrete bottom which the Government recently replaced.

WORKMEN'S COMPENSATION: SCOPE OF EMPLOYMENT.

THE House of Lords has given a very important decision under the Workmen's Compensation Act in the case St. Helen's Colliery, Ltd., *v.* Hewitson. A good many of the colliery workers lived some five miles distant from the colliery, and the colliery company, recognising the importance of securing transport for their employees, had entered into a contract with a railway company providing special trains. By this contract the colliery company agreed to indemnify the railway company against any claims by these passengers in case of accident. Passes were issued to the workmen who desired to use the trains at a less fare than that agreed upon between the colliery company and the railway company, but the employees who used the railway had to sign an agreement with the railway company releasing the company from all claims in case of accident. On October 10, 1921, the respondent, a workman, whilst travelling by one of the trains, sustained injury by a railway accident, and the question raised in the case was, had he sustained an injury by accident "arising in the course of his employment" under the Workmen's Compensation Act, for otherwise by the above agreements he was deprived of any remedy.

The arbitrator had held that he was entitled to compensation, and the Court of Appeal had affirmed that award, but the House of Lords by a majority of four to one had decided otherwise, and this judgment may have considerable bearing on other decided cases under the Workmen's Compensation Acts.

All the judgments delivered are not yet reported, but Lord Buckmaster delivered the leading judgment, and that is reported in the *Times*, November 23.

It is important to observe that he agreed with the arbitrator in finding that it was an implied term of the contract of service that the train should be provided by the employers, and that it was an inseparable part of his contract of employment that the man should have the right to travel by the train, but it was held that it did not conclude the question in the man's favour, as he was not directed to travel by the train, and had he found it convenient, or desirable, he could have arrived at his work by other means, and the real question was, when he entered the train in the morning, was it "in the course of" his employment. The Court of Appeal had relied upon the case Cremins *v.* Guest, Keen and Nettlefolds (1908 1 K. B. 469; *The Builder*, July 4, 1908). That was a case very similar to the present, for by arrangement with the employers, a Colliery, the men were conveyed to and from their work in trains run by the Railway company in carriages owned by the Colliery company to a platform under the employers' control. Whilst standing on this platform an employee was knocked down by the train and killed, and the Court of Appeal held in that case that, as it was an implied term of the contract that the men should have the option of being conveyed to and from their work, the employment included the time of transit.

The House of Lords has now disapproved of this decision, and Lord Buckmaster, in the judgment now delivered, distinguishes between a case where a man has a right to use a means of conveyance and where he is under obligation to use it. Thus he pointed out that an employee entitled by his contract of service to a holiday with a free ticket would have a right to be in the train, but that it would be difficult to say, if an accident occurred to him, that it arose in the "course of his employment" when, as also in the present case, he was under no control nor bound in any way to use the train, and the case of Holmes *v.* Great Northern Railway Company (1900 2 K. B. 209) was distinguished, as the man in that case had been told to go to Hornsey, and a train was provided for him at King's Cross, and thus he was under orders at the time in question. Lord Shaw of Dunfermline dissented from the judgment of the rest of the House, and, moreover, indicated his opinion that the decision involved such hardship—these men being deprived by their contracts of any other remedy—that legislation would be required to alter the law as now laid down.

The important point in this dissentient judgment of Lord Shaw is that he considered that the present decision would overrule the cases Cremins *v.* Guest Keen, and Nettlefolds ("ubi sup"), Walton *v.* Tredegar Iron and Coal Company (B. W. C. C. 592), and Gane *v.* Norton Hill Colliery Company (1909 2 K. B. 539; *The Builder*, July 10, 1909). Walton *v.* Tredegar Iron and Coal Company was a case where a collier was allowed to travel to and from his work free of charge on a train provided by a railway company by arrangement with the employers, but under the contract of service with the employee he was to desist from using the train whenever required to do so by the employers. In attempting to join a train whilst in motion he was killed, and the Court of Appeal held that the arbitrator had been justified in holding that the man's conduct did not take him out of the sphere of employment, and that the accident arose out of and in the course of the employment, and in thus holding the Court of Appeal followed Cremins *v.* Guest, Keen and Nettlefolds. Gane *v.* Hill Norton Colliery appears rather different in character. There a man was returning from work, and he chose a short cut which involved crossing a line which was under the control of his employers when he sustained injury from some trucks which were being moved and the Court of Appeal held the accident arose out of and in the course of the employment: there were other ways the man could have used, but this was the shortest, and he used it with the knowledge of his employers. This case would have to be considered in the light of the decision in the House of Lords in Stewart & Son *v.* Longhurst (1917 A. C. 249; *The Builder*, April 6, 1917), a case in which it was held that, a point hitherto insisted upon, viz., that the place where the accident happened must be in the possession or control of the employers, was not essential, and as the place where the man was killed formed the only access to the place of work and was dangerous it was held that, as the man by his contract of service was compelled to be at that place when the accident occurred, he had sustained injury by accident in the course of his employment.

This fact that the man had to be at the place distinguishes Stewart *v.* Longhurst from the present decision and also from Thom *v.* Sinclair (1917 A. C. 127; *The Builder*, April 27, 1917), to which Lord Shaw referred in his judgment, and the present decision is supported by the case Davidson *v.* McRobb (1918 A. C. 304; *The Builder*, August 2, 1918), where the majority of the House held that a man was not killed in the course of his employment who had gone ashore from a ship for his own purposes and had met his death some sixty yards from the ship.

We have shown that this decision in the case we are considering in the House of Lords has thrown some doubt on some of the decided cases which have interpreted the expression "in the course of," but it remains to be seen what is the test to be applied now that decision has been given, and it appears that the test would be: was the man under his contract of service compelled to be at the place where the accident happened. In the case we are considering it will be seen, according to the finding of the House of Lords, there was no compulsion, as it was entirely optional, but we cannot but agree with the opinion expressed by Lord Shaw that the case is a hard one and some amendment in the law is desirable now such a narrow interpretation has been placed upon the expression "in the course of the employment." So long as this man was in fact proceeding to his work and taking the means provided by the employers to gain access to the place of work it would appear to the layman reasonable to consider he was in the course of his employment, even although he was free to select another means of arriving at his place of work, and it would seem beside the point to say that this cannot be so because if, under like conditions as to his ticket, when he was going on a holiday it would be argued he would also be in the course of his employment. The intention of the man and of his employers must surely be considered, and the distinction of whether a man is furthering his employers' business or only acting for his own pleasure seems the only simple test to apply. This decision is, however, now law unless legislative action is taken; and it will considerably complicate the law, for it throws doubt on the principle adopted in many decided cases. We may revert to the case when it is fully reported.

City Street Improvements.

IT was decided by the Corporation of London on November 29 to postpone indefinitely the proposal of the Improvements and Finance Committee for the construction of a new street from St. Martin's-le-Grand to Gresham-street, across the old General Post Office site, and to proceed with the original scheme for the widening of St. Martin's-le-Grand to 80 ft. from Newgate-street to Gresham-street; the widening of Gresham-street from St. Martin's-le-Grand to Foster-lane, and the widening of Cheapside at Sweeting's corner to the junction with St. Martin's-le-Grand to about 95 ft.

Sewage Purification.

We have received from Messrs. Tuke & Bell Ltd., of 27, Lincoln's Inn Fields, W.C., a copy of a new booklet on country house sewage purification, which they have just issued. They are prepared to send this booklet post free to any architects, builders, or private persons who may be interested in the question of sewage purification.

Mr. George Robson.

The death occurred at the Grand Hotel, Newcastle, on December 1, of Mr. George Robson, aged 73 years, a well-known North of England master plumber and hot-water engineer.

THE SCOTTISH BUILDER

STONE DECAY: ITS CAUSES & TREATMENT.

DR. CARRICK ANDERSON lectured on November 30 to the Architectural Craftsmen's Association, Glasgow, on the subject of stone decay.

The lecturer said he proposed to confine what he was about to say to the wasting of the ordinary freestones used in Scottish cities, which was brought about by atmospheric influences.

It was important at the outset to remember that these freestones were sedimentary rocks, which meant that they were originally found as sediments or deposits in water. They had become consolidated into firm masses through the particles of sand having been cemented together by substances that were first of all dissolved in water. The commonest cements were carbonates and silicates of lime, and magnesia and iron, and also oxide of iron. None of these was soluble in pure water; each was introduced among the sand particles as a soluble bicarbonate through the instrumentality of water containing carbonic acid. As the water evaporated, the bicarbonates became broken up and insoluble carbonates were slowly deposited around the grains of sand, partly filling up the intervening spaces and uniting the grains to one another. By further changes the bicarbonate of iron became converted into red oxide, giving rise to the coloured sandstones, while bicarbonate of lime to some extent reacted with the small quantities of silica which were frequently present in natural waters to form silicate of lime. The sandstones so formed were still more or less permeable by water, and, if water introduced into them carried carbonic acid in it, the carbonates of lime and magnesia in particular would be liable to be redissolved as bicarbonates and so removed from their adhesion to the sand grains which would thus become detached. This dissolved carbonate was then ready to be transported whithersoever the movement of the water might carry it.

The purest country air contained nearly three parts of carbonic acid in 10,000, but in cities and towns this figure was increased as a result of the combustion of fuels and the respiration of men and animals in a limited area. In still weather and especially in fogs it might be doubled. Rain falling on a stone surface therefore, especially in a city, became charged with carbonic acid. In addition, it washed out of the air the sulphur acids formed from the combustion of the sulphur that was always present in coal, and gained a further supply of these active substances from the sooty particles that rest on every surface. Sulphuric acid thus became a constituent of the water that fell on any city building, and this when it penetrated the stonework changed the carbonate of lime into sulphate. It might be affirmed that as a result sulphates were present in all city decayed stones at one time or another in their history.

The progress of decay in the stonework of a building was marked by two stages which might be visible at one time on the same structure. It was matter of common observation that the earliest indications of decay generally took the form that individual stones began to crumble on the surface and to throw off particles or scales, and that it was often only a considerable time after that anything like a general disintegration of the surface set in. Both the localised and the more general form of wasting were brought about by the movements of water within the stonework, but they operated in different ways to produce the two results. When acid water penetrated the stones it dissolved some of the lime cement and then in drying out deposited this anew in positions different from those from which it had been removed. These new deposits would be formed in largest amount on and underneath the surface of those stones from which progressive evaporation took place most freely, either by reason of their porosity or their position, or from some other cause or combination of causes determining the ready escape of water from their surface. The sulphate of lime carried by this water was deposited in the surface layers when the water evaporated and by its expansion when crystallising burst off the outer particles of sand. It was this that appeared to produce the localised areas of wasted surface that were the early symptoms of decay. The material, however, that by its accumulation in these places produced such effects had been steadily withdrawn from other parts and the cement was consequently undergoing reduction elsewhere. By and by this depletion would reach a point at which a general softening of the surface became manifest to the eye. The building had a washed-out appearance and the general surface was soft and crumbling.

It was the same movement of soluble saline bodies, constituting the so-called "quarry sap," that by its manifestations afforded foundation for the builder's dislike of putting recently quarried stones into a building.

The remedies proposed might be grouped for the most part under one or other of two heads: (*a*) Those in which a vulnerable cement existing in the stone was intended to be replaced by one less open to attack by atmospheric agencies, this being effected by the use of an active chemical substance; (*b*) those in which attention was directed towards preventing or minimising the entrance of the destructive acid water into the stonework. In the former class were included water glass, the fluosilicates or fluates, and the sulphates of aluminium and of zinc. In the lecturer's experience such remedies had a very limited value. The substitution of a natural cement slowly formed over a long period by one theoretically more stable but quickly produced, and in any case of improved powers of adhesion, was a policy of doubtful expediency, and, in view of what had been said regarding the part played in stone decay by the internal movement of saline water, it appeared to leave untouched the chief agency in the destructive process. Of the class of waterproofing agents the commonest was, perhaps, paraffin oil either alone or along with raw linseed oil and with the latter sometimes an admixture of white lead. These were cheap, and for a time had the effect of excluding rain water. They were, however, not permanent, and either singly or together had the result of darkening the stone, producing a sorry effect that had generally to be counteracted after a few years by a larger addition of white lead or other paint, so that in time the stonework was entirely overlaid and buried out of sight.

Wax preparations formed a considerable class, and had the advantage over paraffin and linseed oils that they did not directly disfigure the building. The wax, however, remained always soft, and was apt thereby to cause increased adhesion of dust and soot particles to the surface of the stonework so that indirectly in time the wax covered surface was darkened as compared with an untreated surface of the same stone. A more serious disability, however, attended the use of these wax preparations, due to the fact that wax did not readily penetrate freestone, and while the solvent might enter a considerable distance, the greater part of the wax remained on the surface and was gradually removed by rain and wind. The ideal preservative for use alike on new and on wasted stonework should combine, as far as possible, the qualities of ready penetration, pronounced waterproofing power, and adhesiveness to the extent of reinforcing the existing natural cements in the stone, and so hardening and consolidating its outer layers. It must at the same time be nearly colourless and transparent so as not to affect the natural shade and grain of the stone, and finally it must have a high degree of permanence in resisting the influence of a moist and contaminated atmosphere.

BUILDING TRADE WAGES IN SCOTLAND.*

THE following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Brick layers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Brick-layers' Labourers.	Masons' Labourers.
Aberdeen	1/7	1/8	1/7	1/8	1/7	1/7	1/4½	1/-	
Airdrie	1/7	1/7	1/7	1/8	1/7	1/7	1/6½	1/2½	
Alexandria	1/7	1/7	1/7	1/8	1/7	1/7	1/6½	1/2	
Arbroath	1/7	1/6	1/6	1/7	1/6	1/6	1/5	1/1	
Ayr	1/7	1/7	1/7	1/8	1/7	1/7	1/6½	1/2½	
Bathgate	1/7	1/7	1/7	1/8	1/7	1/7	1/6½	1/1 to 1/2	
Blairgowrie	1/7	—	1/7	1/7	1/7	1/7	1/6½	—	
Bo'ness	1/7	1/7	1/7	1/8	1/7	1/7	1/6½	1/2	
Coatbridge	1/7	1/7	1/7	1/8	1/7	1/7	1/6½	1/2½	
Dumbarton	1/7	1/7	1/7	1/8	1/7	1/7	1/6½	1/2	
Dumfries	1/5	1/5	1/5	1/6	1/5	1/6	1/5	1/1 to 1/2	
Dundee	1/7	1/7	1/7	1/8	1/7	1/7	1/6½	1/2½	
Dunfermline	1/7	1/7	1/7	1/8	1/7	1/7	1/6½	1/2½	
Edinburgh	1/7	1/7	1/7	1/8	1/8	1/7	1/6½	1/2½	
Falkirk	1/7	1/7	1/7	1/8	1/7	1/7	1/6½	1/2½	
Fort William	1/7	1/6	1/6	1/7	1/6	1/6	1/6½	1/1½	
Galashiels	1/5	1/5	1/5	1/6	1/5	1/5	1/5½	1/1	
Glasgow	1/7	1/7	1/7	1/8	1/7	1/7	1/6½	1/2½	
Greenock	1/7	1/7	1/7	1/8	1/7	1/7	1/5½	1/1 to 1/2½	
Hamilton	1/7	1/7	1/7	1/8	1/7	1/7	1/6½	1/2½	
Hawick	1/5	1/5	1/5	1/6	1/5	1/5	1/5½	1/1½	
Helensburgh	1/7	1/7	1/7	1/8	1/7	1/7	1/6½	1/2½	
Inverness	1/3½	—	1/3	1/4	1/4½	1/4	1/3½	10d. to 1/2	
Kilmarnock	1/7	1/7	1/7	1/8	1/7	1/7	1/6½	1/2½	
Kirkcaldy	1/7	1/7	1/7	1/8	1/7	1/7	1/6½	1/2½	
Kirkwall	1/7	1/5	1/3	1/4	1/4	1/4	1/4	1/-	
Lanark	1/7	1/7	1/7	1/8	1/7	1/7	1/5½	1/2½	
Leith	1/7	1/7	1/7	1/8	1/7	1/7	1/6½	1/2½	
Motherwell	1/7	1/7	1/7	1/8	1/7	1/7	1/6½	1/2½	
Perth	1/7	1/7	1/7	1/8	1/7	1/7	1/6½	1/2½	
Stirling	1/7	1/7	1/7	1/8	1/7	1/7	1/6½	1/2½	
Stirlingshire (Eastern District)	1/7	1/7	1/7	1/8	1/7	1/7	1/6½	1/2½	
Wishaw	1/7	1/7	1/7	1/8	1/7	1/7	1/6½	1/2½	

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 901.

Dundee.—OFFICES.—New offices at Wallacetown Public School, Crescent-street, for Education Authority. All particulars from Mr. J. E. Williams, executive officer, Education Offices, Dundee.

NEW BUILDINGS IN SCOTLAND.

Paisley.—The Dean of Guild Court has passed plans for seven houses.

Stirling.—The T.C. has passed plans for additions and alterations to property in Baker-street, for the Trustees of the Holy Trinity Church; a cottage at Randolph-road, for Mr. A. Sands.

Dalry.—The Northern District Committee of the Ayrshire County Council has received the sanction of the Board of Health to erect 12 houses at Dalry.

Coatbridge.—The Dean of Guild Court has passed plans for an extension to the new institute, Rosehall, at an estimated cost of £380.

Dreghorn.—At the last meeting of the Northern District Committee of the Ayrshire County Council, held at Kilwinning, it was stated that a start had been made on the erection of 10 houses at Dreghorn, estimated to cost £4,295 17s. 1d.

Dundee.—The Park Committee proposes to erect a bandstand in the Baxter Park, the estimated cost of which is £1,610.

Edinburgh.—In connection with the proposed provision of a new hospital, the directors of the Edinburgh Royal Maternity and Simpson Memorial Hospital have decided to appoint an influential committee to represent the various bodies interested, to consider and report on the subject generally, and especially as to future relations with the hospital and infirmary and as to suitable sites.

Glasgow.—The Corporation propose to invite competitive designs for the erection of a new public hall on a site in London-road and Charles-street.

Stevenston.—The Northern District Committee of the Ayrshire County Council has received the Board's approval to the erection of 36 houses at Stevenston.

Saltcoats.—The Corporation Public Health Committee has been authorised to make investigations and report on the possibility of remodelling the buildings, formerly used as a creamery, for housing purposes.

Fort William.—The T.C. has decided to apply to the Scottish Board of Health for authority to carry out a modified scheme for the improvement of the insanitary area on the north side of High-street, between Fraser-square and Ben Nevis Hotel-lane. This scheme will necessitate the acquisition of a number of properties and the erection or reconstruction of 22 houses.

Beith.—The Northern District Committee of the County of Ayr has been authorised to erect 12 houses at Beith.

Land for School Purposes.

Mr. Howard Martin, Official Arbitrator, has issued his award in a claim by Mr. Arthur John McConnell against the Kent County Council (acting as the Local Education Authority), concerning the Council's compulsory acquisition of freehold land having a frontage of 138 ft. to Upper Holly Hill-road, Belvedere, and comprising 2 roods, 1 pole, 8¾ square yards or thereabouts.

The award is as follows:—"... it being agreed that a strip of land 12 ft. in width adjoining the land subject to the notice to treat making a total frontage of 150 ft. is to be included in the purchase, I award that the Acquiring Authority is to pay the claimant the sum of £450 as compensation, and I order the Acquiring Authority to pay for the stamp on the award, and the claimant to contribute £26 5s. towards the costs of the Acquiring Authority."

Obituary.

The death has occurred of Mr. Richard Morgan, one of the partners in the firm of Messrs. R. Morgan & Sons, builders, Kidwelly (Carmarthenshire). The deceased was 59 years of age, and intimately connected with the public life of the district.

The death has occurred, at Tynedale-terrace, Hexham, of Mr. Edward Snowball, aged 82, builder and contractor, and one of the oldest and most esteemed residents of the town.

RATES OF WAGES IN THE BUILDING TRADE.

The following are the rates of wages in the building trade in England and Wales. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Brick-layers.	C'p'ters. Joiners.	Plas-terers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Accrington	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Altrincham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Ashton-under-Lyne	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Barnsley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Barrow-in-Furness	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Barry	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bath	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Bedford	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Birmingham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bishop Auckland	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Blackburn	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Blackpool	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bolton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bournemouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Bradford	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Brentwood	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Bridgwater	1/3	1/3	1/3	1/3	1/3	1/3	1/3	0/11½
Brighton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Bristol	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Burnley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Burton-on-Trent	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bury	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Cambridge	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Cardiff	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Chatham	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Chelmsford	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Cheltenham	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Chester	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Chesterfield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Colchester	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Coventry	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Crewe	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Darlington	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Derby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Doncaster	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Dudley	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Durham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
E. Glam.(Mon. Vall.)	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Eastbourne	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Exeter	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/0½
Folkestone	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	0/11½
Gloucester	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Grantham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Grays	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/6½	1/2½
Grimsby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Great Yarmouth	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Guildford	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Halifax	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Harrogate	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Hartlepools	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Hastings	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	0/11½
Hereford	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Huddersfield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Hull	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Ipswich	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Lancaster	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Leamington Spa	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Leeds	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Leicester	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Lichfield	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Lincoln	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Llanelly	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
London	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/6½	1/2½
Loughborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Luton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Maidstone	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Manchester	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Mansfield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Merthyr Tydfil	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Middlesbrough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Newcastle-on-Tyne	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Newport, Mon.	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Northampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Norwich	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Nottingham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Oakham	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Oldham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Oxford	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Plymouth	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Pontypridd	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Portsmouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Preston	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Reading	1/5½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Rochdale	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Rochester	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Rugby	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
St. Albans	1/6½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
St. Helens	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Scarborough	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Sheffield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Shrewsbury	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southampton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Southend-on-Sea	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Southport	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
South Shields	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Stockport	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Stockton-on-Tees	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Stoke-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Stroud	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3	0/11½
Sunderland	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Swansea	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Swindon	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Taunton	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	0/11½
Torquay	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Tunbridge Wells	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Wakefield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Walsall	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Warrington	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
West Bromwich	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Wigan	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Windsor	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Wolverhampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Worcester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
York	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2

(For rates of wages in the Building Trade in Scotland, see page 900.)

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING AND PAINTING.

DECEMBER 8.—**Ossett.**—HOUSES.—Erection of 47 houses on the Horbury-road Site, for the T.C. Mr. H. Holmes, Borough Engineer, Town Hall, Ossett.

DECEMBER 8.—**Weston-super-Mare.**—CONVENIENCE.—Erection of a public convenience with appurtenant works, for the U.D.C. Mr. Harold A. Brown, Surveyor, Town Hall, Weston-super-Mare.

DECEMBER 10.—**Bolton-upon-Dearne.**—DWELLING HOUSES.—Erection of 20 dwelling houses (4 parlour type, 16 non-parlour type) in Barmborough-lane, Goldthorpe, for the Bolton-upon-Dearne U.D.C. Mr. William Hy. Adams, M.S.A., Council Offices, Bolton-upon-Dearne. Deposit 10s. 6d.

DECEMBER 10.—**Bridport.**—RIFLE RANGE.—Erection of miniature rifle range, for the Dorset Territorial Army Association. Mr. F. T. Maltby, architect, Dorchester.

DECEMBER 10.—**Carlisle.**—PAINTING.—For painting to properties, 6 to 8, Castle-street, and repainting and relettering street name plates, for the T.C. Mr. H. C. Marks, City Engineer, 18, Fisher-street, Carlisle.

DECEMBER 10.—**Glamorganshire.**—REPAIRS AND PAINTING, &C.—For carrying out, for the Glamorgan Standing Joint Committee, the following works:—(*a*) Hirwain Police Station, internal and external painting and repairs; (*b*) Pontlottyn Police Station, internal and external painting and repairs; (*c*) Treorchy Police Station, internal and external painting and repairs; (*d*) Penarth Police Station and Court, installation of electric light. Wages and hours clauses in contract. The respective Police Stations or at County Hall, Cardiff, for all works.

DECEMBER 10.—**Grays.**—WELFARE CENTRE.—Erection of child welfare centre, for the U.D.C. Surveyor, Council Offices, Grays. Deposit £2 2s.

DECEMBER 10.—**Howdon.**—TIMBER JETTY.—Construction of timber jetty in Howdon Yard Bay, for the Tyne Improvement Commissioners. Mr. Albert Blacklock. Secretary, Tyne Improvement Commission Offices, Bewick-street, Newcastle-on-Tyne. Deposit £2 2s.

DECEMBER 10.—**Huddersfield.**—HOUSE.—Erection of detached house in Ashbrow-road. Messrs. J. H. Hall & Son, architects, Exchange Buildings, Market-street, Huddersfield.

DECEMBER 10.—**Leek.**—PAINTING.—For painting interior of houses on housing estate, for the U.D.C. Mr. W. E. Beacham, Surveyor, Town Hall, Leek.

DECEMBER 10.—**Morar.**—ARCHWAY.—For erection of archway, for the Committee of the North Morar War Memorial. Bank of Scotland, Mallaig.

DECEMBER 10.—**Newcastle-on-Tyne.**—FLATS.—Erection of 208 dwellings in flats in two stories at Delaval-road. Benwell, for the T.C. Housing Architect, 18, Cloth Market, Newcastle. Deposit £2 2s.

DECEMBER 10.—**Scotland.**—MAINTENANCE WORKS.—For the execution of Maintenance Works during the period of three years as follows:—Edinburgh, Glasgow, Stirling, Aberdeen, Dundee, Paisley, Greenock, Perth, Inverness, for H.M. Commissioners of Works. Contracts Branch, H.M. Office of Works, Storey's Gate, S.W.1. Deposits: 10s. for carpenters' and joiners' and ironmongers' work, and plumbers' work; 2s. 6d. for glaziers' work, and 5s. for other trades.

DECEMBER 10.—**Sheffield.**—PAINTING.—For painting at (1) Hollow Meadows Buildings (late Industrial School), (2) Crookamoor Vestry Hall, (3) City-road Cemetery, chapels, &c., for T.C. Mr. F. E. P. Edwards, architect, Town Hall, Sheffield.

*DECEMBER 10.—**Tilbury.**—HOUSES.—Erection on reinforced concrete slab foundations, already laid, of about 500 houses in some special form of construction other than bricks, for which unskilled labour can be used. There is an abundance of cement and ballast available locally. Council's Engineer and Surveyor, Council Offices, Tilbury, Essex.

DECEMBER 11.—**Doncaster.**—SHELTER, &C.—Construction of an omnibus shelter and ladies' and gentlemen's lavatories in Waterdale, for the T.C. Mr. F. Oscar Kirby, Borough Engineer, 2, Priory-place, Doncaster. Deposit £2 2s.

DECEMBER 11.—**Edmonton, N.18.**—BUILDING ADDITIONS.—Erection of certain additional buildings at the Laundry, Edmonton House, Bridport-road, Edmonton, for the Guardians of the Edmonton Union. Mr. J. C. S. Mummery, A.R.I.B.A., 34, Bloomsbury-square, W.C.1. No quantities will be provided.

DECEMBER 11.—**Glasgow.**—HOUSES.—Erection of 34 tenements at Dumbarton-road, Balmoral, and Earl-streets, for the T.C. Mr. J. Lindsay, Town Clerk, City Chambers, Glasgow.

DECEMBER 11.—**Gloucester.**—TELEPHONE REPEATER STATION.—Erection of a telephone repeater station at Gloucester, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (payable to the Secretary).

DECEMBER 11.—**Hunslet.**—JOBBING WORKS.—For small bricklayer's, joiner's, plumber's, and ironmonger's work for three months, for the Board of Guardians. Mr. Fred W. Mee, Clerk, Union Offices, Glasshouse-street, Hunslet.

DECEMBER 11.—**Liverpool.**—REPAIRS, &C.—For painting and general repairs to Old Swan Police Station and residences in Derby-lane. Land Steward and Surveyor, Municipal Buildings, Liverpool.

DECEMBER 11.—**West Ham.**—ALTERATIONS.—For alterations to fire station and offices, Stratford, for the B.C. Borough Engineer, Town Hall, West Ham, E. Deposit £1.

DECEMBER 12.—**Blackpool.**—HOUSES.—Erection of 102 houses, for the T.C. Mr. E. D. Dennis, architect, 27, Clifton-street, Blackpool.

DECEMBER 12.—**Burton-upon-Trent.**—HOUSES.—Erection of 48 houses for the T.C. Mr. G. T. Lynam, Borough Engineer, Town Hall, Burton-upon-Trent.

DECEMBER 12.—**Cardiff.**—FIREMEN'S QUARTERS.—Erection of firemen's quarters, &c., at the Central Fire Station, Westgate-street, for the T.C. Mr. T. Peirson Frank, F.S.I., City Architect, City Hall, Cardiff. Deposit £2 2s.

DECEMBER 12.—**Edinburgh.**—TELEPHONE EXCHANGE.—Erection of a telephone exchange at Newington, Edinburgh, for H.M. Commissioners of Works. Architect, H.M. Office of Works, 45, Drumsheugh-gardens, Edinburgh. Deposit £1 1s.

DECEMBER 12.—**Kirkhampton.**—PAINTING, &C.—Decorating, &c., inside Wesleyan Chapel. Alderman Booth, Kirkburton, Huddersfield.

*DECEMBER 12.—**London, N.1.**—DEMOLITION.—Pulling down the upper portion of an old building in their depot, Liverpool-road, N.1. for the Metropolitan Borough Council of Islington. Borough Engineer's Office, Municipal Offices, Tyndale-place, N.1.

DECEMBER 12.—**Newton Abbot.**—LAVATORY.—For the erection of a gentlemen's lavatory in Market-street, for the U.D.C. Mr. C. D. White, Surveyor, Town Hall, Newton Abbot.

DECEMBER 12.—**Nottingham.**—PAINTING, &C.—For internal cleaning and painting at Dunkirk Council, High Pavement, Leen Side, Lenton Trust, St. Mary's R.C., and Sherwood Council Schools, for the T.C. Education Office, South-parade, Nottingham. Deposit £1 each contract.

DECEMBER 12.—**Rochdale.**—PAINTING.—For painting work at the Art Gallery, for the T.C. Borough Surveyor, Rochdale.

DECEMBER 12.—**Southend-on-Sea.**—CONCERT HALL, &C.—For the execution and completion of a concert hall and shelters on the Second Promenade, Pier Hill, for the Corporation. Mr. Robert H. Dyer, Borough Engineer, Municipal Buildings, Southend-on-Sea. Deposit £2.

DECEMBER 12.—**Southend-on-Sea.**—HOUSES.—For the erection and completion of 66 houses, for the Corporation. Mr. Robt. H. Dyer, Borough Engineer, Municipal Buildings, Southend-on-Sea. Deposit £2.

DECEMBER 13.—**Newcastle.**—NURSES' HOME.—The Hartlepool Guardians are inviting tenders for the erection of a nurses' home at Howbeck House.

DECEMBER 13.—**Penarth.**—HOUSES.—For erection for the U.D.C. of 22 houses at Coleridge-avenue and Comerswell-gardens' sites, Penarth. Council may accept tender for whole or part of the scheme. Surveyor, Council Offices, Penarth. Deposit £2 2s.

DECEMBER 13.—**Woolwich, S.E.**—HOUSES.—Erection of sixty houses, for the Metropolitan Borough Council of Woolwich, on their housing estate at Eltham. Council's Architect; Mr. John Sutcliffe, Borough Engineer, Town Hall, Woolwich. Deposit £3 3s.

DECEMBER 14.—**Cork.**—LODGE, &C.—Erection of entrance lodge and gateway at the South Infirmary, for the Committee of Management. Mr. J. McCullen, architect, Cork.

*DECEMBER 14.—**Harlesden.**—Erection of new Steward's quarters and alterations to the Working Men's Club and Institute, Harlesden, N.W. Harold Shaw, 60, Nicoll-road, Harlesden, N.W.10.

DECEMBER 14.—**Morecambe.**—HOUSE.—Erection of a detached residence at Heysham-road, Morecambe. Mr. W. H. Porter, York House, Franklin Mount, Harrogate. Deposit 10s. 6d.

DECEMBER 14.—**Rowley Regis.**—HOUSES.—For erecting 12 semi-detached houses and incidental works of house drainage, &c., for the U.D.C. Mr. Daniel Wright, Clerk, Rowley Regis.

DECEMBER 14.—**Wiggenhall St. Mary Magdalen.**—ADAPTATION.—For adapting and repairing the farm buildings at Orton's Farm, Wiggenhall St. Mary Magdalen, for the Norfolk C.C. Mr. Victor Playle, County Land Agent, Shirehouse, Norwich. Deposit £1 1s.

DECEMBER 15.—**Bradford-on-Avon.**—HOUSES.—For the construction of twelve houses, for the U.D.C. Surveyor, Westbury House, Bradford-on-Avon. Deposit £1 1s.

DECEMBER 15.—**Carshalton.**—HOUSES.—Erection of 28 cottages in twelve blocks and eight flats in two blocks, for the U.D.C. Mr. W. W. Gale, architect, Council Offices, Carshalton. Deposit £2.

*DECEMBER 15.—**Edgware, Middlesex.**—RESIDENCE.—Erection of a residence with garage and chauffeur's accommodation over; to be completed by May 31, 1924, for the proprietor. Mr. R. Heath Mew, F.R.I.B.A., 119, Moorgate-street, E.C. Deposit £1 1s.

DECEMBER 15.—**Huddersfield.**—EXTENSIONS.—For extensions to West Riding Court House at Huddersfield, for the West Riding Standing Joint Committee. Mr. Percy O. Platts, County Architect, County Hall, Wakefield. Deposit £1.

DECEMBER 15.—**Markinch.**—HOUSES.—Erection of six houses and fencing, for T.C. Mr. W. K. O. Shephard, Town Clerk, Markinch.

DECEMBER 15.—**Prestonpans.**—PAINTING.—For painting of six houses, for T.C. Messrs. R. & A. K. Smith, surveyors, 44, Queen-street, Edinburgh.

DECEMBER 15.—**Wrotham.**—OFFICES.—For the erection of new Council Offices at Borough Green, for the U.D.C. Surveyor, Borough Green.

*DECEMBER 17.—**Brighton.**—PAINTING.—External painting of the Race Stand buildings and sundry other work connected therewith, for the Race Lessees of the County Borough of Brighton. Borough Surveyor Town Hall, Brighton. Deposit £2 2s.

DECEMBER 17.—**Croydon, Surrey.**—HOUSES.—Erection of 48 houses (comprising 80 tenements) at Parchmore-road, Thornton Heath, in three sections, one of eight houses and two of 20 each, or as one tender for the whole, for the County Borough of Croydon. The Borough Engineer, Town Hall, Croydon. Deposit £2 for each section, or £6 for the whole of sections, which will be returned on receipt of a bona-fide tender.

DECEMBER 17.—**Dublin.**—BUILDING WORKS, &C.—Building works and supplies for Commissioners of Public Works for six months. Mr. J. J. Healy, Secretary, Office of Public Works, Dublin. Deposit £1.

DECEMBER 17.—**Poplar.**—TENEMENTS, &C.—Erection of 31 tenements with shops and showrooms on a site at Bow-road, for the B.C. Mr. Harley Heckford, Borough Surveyor, Council Offices, Poplar. Deposit £3 3s.

DECEMBER 18.—**Cheltenham.**—ADAPTATION.—Adaptation of the Wolseley Hotel, Cheltenham, to form a telephone exchange, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (payable to the Secretary).

DECEMBER 18.—**Glasgow.**—HOUSES.—Erection of 126 houses at Whitefield-road and Brand-street, for the T.C. Mr. J. Lindsay, Town Clerk, City Chambers, Glasgow.

DECEMBER 18.—**Hackney, E.8.**—BUILDING WORKS.—Building works, being extension and completion of the electricity sub-station at Dalston-lane, Hackney, for the Metropolitan Borough of Hackney. Borough Electrical Engineer, 306, Mare-street, Hackney, E.8, on and after November 26. Deposit £1 1s.

DECEMBER 19.—**Birmingham.**—BUILDING.—Erection of an employment exchange at Aston, Birmingham, for the Commissioners of His Majesty's Office of Works, Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (payable to the Secretary).

DECEMBER 19.—**Cowdenbeath.**—HOUSES.—Erection of six houses in Stenhouse-street, for the T.C. Mr. C. A. Alexander, Burgh Surveyor, Town House, Cowdenbeath. Deposit £2 2s.

DECEMBER 19.—**Featherstone.**—HOUSES.—Erection of 20 houses at Little-lane, Purston, near Pontefract, for the Featherstone U.D.C. Mr. Samuel Chesney, A.R.I.B.A., Council Offices, Featherstone, near Pontefract. Deposit £2 2s.

DECEMBER 19.—**Hackney.**—ADDITIONS.—Erection of new front entrance, receiving wards, porter's lodge, &c., at the Infirmary of the Board of Guardians. Mr. F. R. Coles, Clerk, Offices, Sidney-road, Homerton, E. Deposit £5.

DECEMBER 19.—**Hawksworth.**—FARMHOUSE, &C.—(*a*) Farmhouse and buildings at Lane Side Farm, Hawksworth; (*b*) alterations and repairs to existing farm buildings at Lane Side Farm, Hawksworth, for the West Riding Small Holdings' Committee. Land Agent, County Hall, Wakefield. Deposit £1.

*DECEMBER 19.—**London, E.9.**—BUILDING ADDITIONS.—Erection and completion of new front entrance, receiving wards, porter's lodge, &c., at the Infirmary, High-street, Homerton, E.9, for the Guardians of the Hackney Union. Mr. Frank R. Coles, Clerk to the Guardians, Guardians' Offices, Sidney-road, Homerton, E.9. Deposit £5.

DECEMBER 19.—**West Riding.**—REPAIRS.—Adaptations and repairs to existing farmhouse and buildings on Loversall Estate and Carr Lodge Farm, for the West Riding Small Holdings Committee. County Land Agent, County Hall, Wakefield.

DECEMBER 20.—**Leigh, Lancs.**—TELEPHONE EXCHANGE.—Erection of a telephone exchange at Leigh, Lancs, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street London, S.W.1. Deposit £1 1s. (payable to the Secretary).

*DECEMBER 20.—**Middlesex.**—HOUSES.—Erection of 16 houses in Albany-road, Enfield Wash, Middlesex, for the Enfield U.D.C. Council's Surveyor, Public Offices, Enfield, Middlesex. Deposit £2 2s.

DECEMBER 20.—**Portsmouth.**—FLATS.—For works to be executed and materials to be provided for the erection and completion of four blocks of flats in Voller-street, Landport, and for maintenance thereof in thorough repair for six calendar months from the completion thereof, for the Portsmouth T.C. Mr. Arthur W. Ward, Borough Engineer, Town Hall, Portsmouth.

*DECEMBER 20.—**Rochford, Essex.**—RESIDENCE.—Erection of Medical Officer's residence at Rochford, for the Guardians of the Rochford Union. Mr. Norman Evans Llc. R.I.B.A., 27, County Chambers, Weston-road, Southend-on-Sea. Deposit £1 1s.

DECEMBER 21.—**Kent.**—SCHOOL EXTENSION.—Extension of the School of Art, Beckenham, for the U.D.C. County Education Architect (Mr. W. H. Robinson, F.S.Arc.), Room 69, Sessions House, Maidstone. Deposit £2.

*DECEMBER 28.—**London, N.**—TELEPHONE EXCHANGE.—Erection of a telephone exchange at Palmer's Green, London, N., for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (payable to the Secretary).

*DECEMBER 28.—**Manchester.**—SORTING OFFICE AND TELEPHONE EXCHANGE.—Erection of a sorting office and telephone exchange at Openshaw, Manchester, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (payable to the Secretary).

DECEMBER 28.—**Southampton.**—HOTEL, &C.—Contract No. 1: the erection of a hostel for 45 students (deposit £5 5s.); (2) For the construction of ferro-concrete floors, stairs and flat roofs to the Hostel, "Coignet" system (deposit £2 2s.), for the County Borough of Southampton. Mr. A. L. Roberts, County Architect, The Castle, Winchester. Cheques to be made payable and crossed "Lloyds Bank, Ltd. (Capital and Counties Branch), Winchester."

DECEMBER 29.—**Salford.**—ADDITIONS.—For additions to Union Infirmary, Pendleton, for the Board of Guardians. Mr. E. H. Inchley, Clerk, Offices, Eccles New-road, Salford. Deposit £2 2s.

JANUARY 2,1924.—**Omagh.**—HOUSES.—Erection of 16 pairs of semi-detached dwellings, for the U.D.C. Mr. J. P. McGrath, architect, Londonderry.

JANUARY 9. — **Tynemouth.**— SCHOOL. — The Education Committee are inviting tenders for the erection of a new elementary open-air school in Lovaine-gardens, North Shields, to accommodate 170 children; and also, by the same date, tenders for a new elementary school at Spring-gardens, North Shields, providing accommodation for 845 children.

NO DATE.—**Abergavenny (near).**—BUILDINGS.—For erection of a country residence with garage, stables, cottages, &c., near Abergavenny (Mon). Messrs. Rodger & Stevens, architects, 25, Stoke-lane, Westbury-on-Trym, near Bristol.

NO DATE.—**Dudley Hill.**—CLUB.—Erection of Working Men's Club and Institute at Shirley-road, Dudley Hill. Mr. A. T. Verity, architect, Moor Dene, Birkenshaw.

NO DATE.—**Leeds.**—HOUSE.—Erection of detached house at Stanks, near Leeds. Messrs. F. Mitchell & Sons, architects, 9, Upper Fountaine-street, Albion-street, Leeds.

NO DATE.—**Pontypridd and District.**—BUNGALOW AND SHOP.—For (*a*) construction at Treharris of shop-front and fitting shop with counters, &c., and (*b*) erection at Merthyr-road, Pontypridd, of stone-built bungalow. Mr. J. H. Davies, architect, 67, Taff-street, Pontypridd.

NO DATE. — **Ravensthorpe.** — CONCRETING. — For placing 1,000 super yards of concrete, 6 in. thick, on girders. Messrs. Henry Hamer & Sons, Ltd., Ravens Ing Mills, Ravensthorpe.

NO DATE.—**Rochdale.**—PAINTING.—For school painting during the Christmas holidays. Mr. J. E. Holden, Secretary, Education Office, Baillie-street, Rochdale.

NO DATE.—**St. Albans.**—COTTAGES.—Erection of 10 cottages at Leverstock Green, for R.D.C. Mr. H. F. Mence, 11, St. Peter's-street, St. Albans. Deposit £2 2s.

FURNITURE, MATERIALS, etc.

DECEMBER 10.—**Broadstairs.**—MATERIALS.—Supply of 400 tons of granite macadam to the U.D.C. Mr. H. Hurd, Surveyor, Broadstairs.

DECEMBER 10.—**Hull.**—MATERIALS.—For supply of stores to the Electricity Dept. of the T.C. Mr. H. Bell, City Electrical Engineer, Hull.

DECEMBER 10.—**Manchester.**—PITCH &C.—Supply of pitch and creosote oil for paving purposes. Mr. Henry Mattinson, General Manager, Corporation Tramways, 55, Piccadilly, Manchester.

DECEMBER 12. — **Manchester.** — MATERIALS. — Six months' supplies of lime (lump and small), gun metal, and phosphor bronze castings, paints, &c., and bolts and nuts, and the twelve months' supply of malleable iron castings. Mr. Robert Williamson, Superintendent of the Cleansing Department, Town Hall, Manchester.

DECEMBER 12.—**Manchester.**—PITCH, &C.—Supply to the Paving, Sewering, and Highways Committee of pitch and creosote oil. Paving, &c., Department, Town Hall, Manchester.

DECEMBER 13.—**Dublin.**—SLEEPERS.—Supply to the Great Northern Railway (Ireland) Co. of Baltic softwood sleepers, 9 ft. by 10 in. by 5 in. creosoted and uncreosoted. Mr. J. B. Stephens, Secretary, Amiens-street Station, Dublin.

DECEMBER 13.—**Dublin.**—STORES.—Supply of stores for one year to the Commissioners of Irish Lights. Mr. J. B. Phelps, Sec., Irish Lights Office, Dublin.

DECEMBER 13.—**Pontypridd.**—SUPPLIES.—For supply to the Pontypridd B.G. for use at Central Homes, Pontypridd, the Llwynipia Homes and Children's Homes, Church Village, as from January 1 next, of ironmongery, enamelled goods, drugs, crockery, brooms and brushes, paints and oils, wines and spirits, leather, electrical materials, disinfectants (soaps and liquids), haberdashery, drapery, uniforms, clothing, &c. Mr. William Spickett, Clerk to the Guardians, Union Offices, Pontypridd.

DECEMBER 13.—**Wallasey.**—OILS.—Supply of engine lubrication oil, cylinder oil, and Colza lamp oil, for a period of six or nine months to the T.C. Ferries General Manager, Ferries Office, Seacombe.

DECEMBER 17.—**Newport (Mon).**—SUPPLIES.—For supply to the Newport (Mon) Board of Guardians of boots and slippers, steam coal (washed nuts), paints, paint brushes, engineers' stores, electric light fittings, ironmongery and tinware, brushes, leather sundries, corn and meal, &c. Mr. William Dowler, Clerk to the Guardians, Union Offices, Queen's-hill, Newport (Mon).

DECEMBER 17. — **Warrington.**—OILS.—Supply of lubricating oils for six months to the T.C. Mr. R. Wilson, Sewage Manager, Longford Depot, Warrington.

DECEMBER 18.—**Bedwellty.**—BOOTS, &C.—For supply to Bedwellty Guardians for their out-relief recipients in Tredegar district of boots, shoes, &c. Mr. William Hall, Clerk, Union Offices, Tredegar.

DECEMBER 18. — **Warrington.**—MATERIALS.—Engineer's and plumber's goods, for the Board of Guardians. Clerk, Bewsey Chambers, Warrington.

JANUARY 23, 1924.—**Madras.**—PIPES.—Supply of stoneware pipes and specials, ranging from 4 in. to 18 in. diameter, and aggregating a total length of 400,000 lineal ft., for the T.C. Messrs. James Mansergh & Sons, agents, 5, Victoria-street, S.W. Charge 5s.

NO DATE.—**Salford.**—RETORTS, &C.—Supply of retorts, firebricks, &c., to the T.C. Gas Engineer, Gas Office, Bloom-street, Salford.

ENGINEERING, IRON AND STEEL.

DECEMBER 10.—**Carlisle.**—BRIDGE.—Construction of a steel lattice girder footbridge, 252 ft. long and 6 ft. wide, over the River Caldew, for the T.C. Mr. Henry C. Marks, City Engineer, 18, Fisher-street, Carlisle.

DECEMBER 10.—**Eccles.**—MATERIALS.—Supply of tramway rails, copper bonds, and tie bars, to the T.C. Mr. Thomas S. Picton, Borough Engineer, Town Hall, Eccles. Deposit £1 1s.

DECEMBER 10.—**Glasgow.**—ELECTRIC LIGHTING.—For electric lighting installation of the Kelvindale Housing Scheme. Mr. R. B. Mitchell, City Electrical Engineer, 75, Waterloo-street, Glasgow.

DECEMBER 10.—**Penarth.**—ELECTRIC LIGHTING.—For electric lighting installation at Penarth Police Station and Court, for the Glamorganshire C.C. Mr. W. E. R. Allen, Deputy Clerk, Glamorgan County Hall, Cardiff.

DECEMBER 10.—**Wallasey.**—CRANE.—Supply and erection of a 30-ton overhead electric travelling crane, for the T.C. Mr. B. T. Hawkins, Electricity Department, Sea View-road, Wallasey.

DECEMBER 11.—**Kinross.**—RESERVOIR.—Construction of a brick and concrete water storage reservoir of about 132,000 gallons capacity, and providing and laying 640 yds. of 6, 5 and 4 in. diam. fireclay pipes, for the Fife and Kinross Joint Sanatorium Board. Messrs. Bruce & Proudfoot, civil engineers, 83, Nicol-street, Kirkcaldy. Deposit £2.

DECEMBER 11.—**Liverpool.**—HEATING CHAMBERS.—For the construction of heating chambers and other work at Burlington-street, Gore-street, and Green-lane open-air baths, for the T.C. Chief Superintendent of Baths, 75, Dale-street, Liverpool.

DECEMBER 11.—**London.**—MATERIALS.—Supply to the Director-General, India Store Department, of copper and brass bolt, rod, tubing, plates and sheets, and Babbit's metal. Branch 12, Belvedere-road, S.E.

DECEMBER 11.—**Temple Cloud, near Bristol.**—HEATING (HOT-WATER).—Installing, for the Clutton B.G. in their Institution, a system of hot-water heating and hot-water service, together with sundry other improvements. The Engineer, Clutton Union, Temple Cloud, near Bristol.

DECEMBER 12.—**Bramley.**—ELECTRIC LIGHTING.—For installing electric light at the Institution of the Board of Guardians. Clerk, 1, Green Hill-road, Armley, Leeds.

DECEMBER 12.—**East Grinstead.**—ELECTRIC LIGHT.—For carrying out a scheme of electric lighting at the Institution of the B.G. Mr. Alan Huggett, Clerk, Union Offices, 36, High-street, East Grinstead. Deposit £1 1s.

DECEMBER 12.—**Warrington.**—FENCING.—For 900 lin. yds. of wrought-iron unclimbable fencing, and four sets of gates, for the T.C. Mr. A. M. Ker, Borough Engineer, Warrington.

DECEMBER 15.—**Erpingham.**—GROYNE.—Erection of a new groyne at Overstrand, for the R.D.C. Messrs. A. F. Scott & Sons, 24, Castle Meadow, Norwich.

DECEMBER 15.—**Hull.**—MATERIALS.—For brass, iron, and steel and wood materials, for the Tramways Department. Mr. E. S. Rayner, Manager, Hull.

DECEMBER 15.—**Leeds.**—GAS METERS.—Supply of ordinary and prepayment dry gas meters to the T.C. Mr. C. S. Shapley, Engineer, Gas Offices, Market Hall, Leeds.

DECEMBER 19. — **Edinburgh.**— ENLARGEMENT OF WATER TANK.—For the enlargement of tank at Fairmilehead, for the T.C. Messrs. J. & A. Leslie & Reid, C.E., 29, Waterloo-place, Edinburgh. Deposit £5.

DECEMBER 20.—**South Africa.**—MATERIALS, &C.—Supply to the municipality of Graaf-Reinet of (*a*) cast-iron water-pipes, valves and fittings; (*b*) crude oil engines, generators and street equipment. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

DECEMBER 21.—**Nottingham.**—FILTRATION PLANT.—Construction and erection of filters capable of dealing with three million gallons per 24 hours, at filter works, for the Eastwood T.C. Mr. F. W. Davies, Engineer, Water Dept., Castle Boulevard, Nottingham. Deposit £5 5s.

DECEMBER 26.—**Aberdeen.**—INTAKE, &C.—Construction of an intake and screening house, a 5 ft. diameter conduit and ancillary works alongside the River Dee at Cairnton, Invercannie, for the T.C. Mr. George Mitchell, Water Engineer, 41½, Union-street, Aberdeen. Deposit £5.

DECEMBER 31.—**Kempton Park.**—ENGINES, &C.—Supply and erection of two reciprocating engines and pumps at Kempton Park Pumping Station, for the Metropolitan Water Board. Chief Engineer's Department, 173, Rosebery-avenue, Clerkenwell, E.C. Deposit £3 3s.

DECEMBER 31.—**London.**—CRANES.—Supply of (*a*) 3-ton travelling crane, and (*b*) 30 cwt. workshop crane, for the Central Car Depot of the L.C.C. Tramway Manager, Victoria Embankment, W.C. Deposit £2.

JANUARY 1, 1924. — **Georgetown.**— WATERWORKS PLANT.—Supply and erection of a 250 h.p. crude oil engine and centrifugal pumping set, &c., for the T.C. of Georgetown, British Guiana. Messrs. H. H. Humphreys & Sons, 28, Victoria-street, S.W. Deposit £10 10s.

JANUARY 7.—**Bristol.**—DOCK.—For construction of Eastern Arm, Royal Edward Dock, Avonmouth, for Docks Committee. Mr. Thomas A. Peace, Chief Engineer, Port of Bristol. Deposit £15.

JANUARY 15.—**Toronto.**—SLUDGE PUMP.—Supply and erection at main sewage pumping station of centrifugal sludge pump, for the T.C. Dept. of Overseas Trade, 3B, Old Queen-street, S.W. Reference 12614/ED/KC/2.

JANUARY 16. — **Glasgow.** — REFUSE DISPOSAL WORKS.—Tenders and designs for proposed refuse disposal works at Govan, Glasgow. Mr. W. Greig, Superintendent of Cleansing, 20, Trongate, Glasgow.

JANUARY 17.—**New Zealand.**—PIPES, &C.—Supply of 10 in., 12 in., and 21 in. steel pipes and fittings, for the Orongorongo-Karori Water Main. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

FEBRUARY 5.—**New Zealand.**—GIRDER SPANS.—Supply of plate girder spans to the Public Works Tender Board, New Zealand, for the Stratford Main Trunk Railway. Department of Overseas Trade, 35, Old Queen-street, S.W. Reference 12569/ED/EC.

FEBRUARY 14.—**Argentine.**—POWER STATION.—For the construction of a central electric power station of 15,000 h.p., for the Argentine State Oilfields Administration. Department of Overseas Trade, 35, Old Queen-street, S.W.

MAY 1. — **China.** — BRIDGE. — The Commercial Councillor at Peking has forwarded to the Department of Overseas Trade copies of the official text of a call for tenders by the Hai Ho Conservancy Commission, for the erection of a bridge over the Hai Ho at Tientsin. Tenders must be in the hands of the Commission before noon on May 1, 1924. The cost of erecting the new bridge has been roughly estimated at Tls. 700,000, say £105,000. Department of Overseas Trade, 35, Old Queen-street, S.W. 1. Reference 11647/F.E./E.C./2.

NO DATE.—**Horbury.**—ELECTRIC LIGHT.—Installation of electric light in the Primitive Methodist Church and School. Horbury, Mr. G. W. Outhwaite, Horbury.

NO DATE.—**Hucknall.**—HEATING.—For low pressure hot-water heating installations, to be fixed at Rushcliffe Smallpox Hospital. Mr. E. W. Bostock, Surveyor, Council Offices, Hucknall.

NO DATE.—**Whitminster.**—BRIDGES.—For widening in ferro-concrete, on the Hennebique system, the bridge over the canal at Whitminster, and the Pike Bridge, Eastington, Stonehouse, for the Gloucestershire C.C. County Surveyor, Shire Hall, Gloucester. Deposit £2 2s.

ROAD, SANITARY, AND WATER WORKS.

DECEMBER 10.—**Birmingham.**—ROADS.—For the construction of reinforced concrete foundations to the carriageways and provision of granite kerb in Montgomery-street, South-road, and Henley-street, for the T.C. Mr. H. H. Humphries, City Engineer, Council House, Birmingham.

DECEMBER 10.—**Manchester.**—ROADS.—For making-up Clarence-street, Newton Heath; New-street, Newton Heath; and Coffee-street, Gorton, for the T.C. Paving, &c., Department (District Surveyors' Office), Town Hall, Manchester. Deposit £1 1s.

DECEMBER 10.—**Repton.**—SEWERS.—Construction of stoneware pipe sewers, &c., at Mickleover, for the R.D.C. Messrs. Willcox & Raikes, 63, Temple-row, Birmingham. Deposit £5 5s.

DECEMBER 10.—**Worsborough.**—SEWER.—Construction of a 9 in. pipe sewer along Yews-lane, Worsborough Dale, for the U.D.C. Mr. T. Shield, Surveyor, Saville House, Worsborough Bridge. Deposit £1 1s.

DECEMBER 11.—**Edmonton, N.18.**—ROAD ALTERATIONS.—Alteration and re-forming at a different gradient the entrance road at the Silver-street entrance of the North Middlesex Hospital, Edmonton, N.18, for the Guardians of the Edmonton Union. Mr. J. C. S. Mummery, A.R.I.B.A., 34, Bloomsbury-square, W.C.1. No quantities will be provided.

DECEMBER 11.—**Enfield.**—DRAINAGE.—Construction of 9 in. stoneware pipe surface water drain at Mandeville-road, for the U.D.C. Mr. H. R. Crabb, Surveyor Public Offices, Enfield. Deposit £2 2s.

DECEMBER 11.—**Glasgow.**—ROADS, &C.—Construction of roads and sewers at Merryflatts Housing Scheme, for the T.C Director of Housing, Govan Town Hall, Glasgow.

DECEMBER 11.—**Gosforth.**—SEWERS.—Laying new sewers and formation of roadway on housing site, for the U.D.C. Mr. Geo. Nelson, Surveyor, Council Chambers, High-street, Gosforth.

DECEMBER 11.—**Great Crosby.**—ROADS.—For the widening and reconstruction of College-road, Great Crosby, for the U.D.C. Mr. Joseph A. Wright, Surveyor, Council Offices, Great Crosby.

DECEMBER 11.—**Leeds.**—ROADS.—Making-up of Allerton-avenue, Allerton-grove, back Barkly-grove, and the kerbing and paving of channels at Weetwood-lane Improvement, for the T.C. Highways and Permanent Way Dept., 1, Swinegate, Leeds. Deposit £1 1s.

DECEMBER 11.—**London.**—SEWER.—Construction of a 4 ft. internal diameter sewer in brick of a total length of about 7,290 feet, in Wandsworth and Lambeth, for the L.C.C. Chief Engineer, Old County Hall, Spring-gardens, S.W.1. Deposit £5.

DECEMBER 11.—**London.**—SEWER.—Construction of a brick sewer of varying sizes from 5 ft. to 9 ft. internal diameter, of a total length of about three miles, in Lewisham, for the L.C.C. Chief Engineer, Old County Hall, Spring-gardens, S.W.1. Deposit £10.

DECEMBER 11.—**Preston.**—WATER MAINS.—For the laying of 7 miles 196 yds. of 5 in., 4 in., and 3 in. cast-iron water mains, for the R.D.C. Mr. J. R. Taylor, Surveyor, 160, Walker-street, Preston. Deposit £2 2s.

DECEMBER 12.—**Birmingham.**—SEWERS.—Construction of (1) 649 yds. of brick and concrete circular sewers, and 1,034 yds. of stoneware pipe sewers, at Batchelor's Farm Estate; (2) 60 yds. of brick and concrete culverts, and 1,170 yds. of stoneware pipe sewers, between Pebble Mill-road and Edgbaston Park-road, for the T.C. Mr. H. H. Humphries, City Engineer, Council House, Birmingham. Deposit £2 each.

DECEMBER 13.—**Cambuslang.**—ROADS.—For making up Colebrooke-street, Cambuslang, for the Lanark C.C. Mr. William A. Chapman, Road Surveyor, District Offices, Hamilton.

DECEMBER 13.—**Hastings.**—ROADS.—For construction of a road at Ore, for the T.C. Mr. P. H. Palmer, Borough Engineer, Hastings. Deposit £2.

DECEMBER 13.—**Rawtenstall.**—SEWERS.—For the sewering of Hollin-lane, for the T.C. Borough Surveyor's Office, Town Hall, Rawtenstall. Deposit £1.

DECEMBER 14.—**Nottingham.**—WATER MAINS.—For laying about 452 yards of 6in., 800 yds. of 16in., and 14,760 yds. of 18in. cast-iron pipes, for the T.C. Mr. F. W. Davies, Engineer, Water Dept., Castle Boulevard, Nottingham. Deposit £5 5s.

DECEMBER 15.—**Birmingham.**—SEWERS.—Construction of 1,137 yds. of stoneware pipe sewers in Leach Green-lane and Each Way-lane, for the T.C. Mr. H. H. Humphries, City Engineer, Council House, Birmingham. Deposit £2.

DECEMBER 15.—**Chester.**—ROADS.—For the reconstruction with mastic asphalte on reinforced concrete foundations of Stocks-lane, Delamere-street, City Walls-road, and reconstruction with granite setts on reinforced concrete foundations of Canal-street, for the T.C. Mr. Charles Greenwood, City Engineer. Town Hall, Chester.

DECEMBER 15.—**East Riding of Yorkshire.**—ROADS.—For the strengthening and resurfacing of 16 miles of roads at Beverley (four sections), and 15¾ miles in Hull (three sections), for the C.C. County Surveyor, County Hall, Beverley. Deposit £2 2s.

DECEMBER 17.—**Market Bosworth.**—SEWAGE WORKS.—For sewerage and sewage disposal works at Ibstock, for the R.D.C. Messrs. Elliott & Brown, Burton Buildings, Parliament-street Nottingham. Deposit £3 3s.

DECEMBER 17.—**Mountain Ash.**—ROADS.—Construction of 350 lin. yds. of roadway with sewers and surface water drains, for the U.D.C. Mr. W. G. Thomas, Surveyor, Town Hall, Mountain Ash.

DECEMBER 17.—**Torpoint.**—WATER SUPPLY.—For the provision and laying of 6¼ miles of 8 in. and 6 in. water mains, the construction of valves, chambers, storage reservoir, filter beds, service reservoir, and other works, for the U.D.C. Mr. F. Johns, Council Offices, Torpoint. Deposit £5 5s.

DECEMBER 18.—**Bingham.**—SEWERS.—Construction of 868 yds. of 9 in. stoneware pipe sewers, &c., in Shelford-road, Radcliffe-on-Trent, for the R.D.C. Mr. C. W. Kendrick, Sanitary Surveyor, Council Offices, Bingham. Deposit £1 1s.

DECEMBER 18.—**Salford.**—ROADS.—For paving passages, for the T.C. Borough Engineer, Salford.

DECEMBER 19.—**Hammersmith.**—ROADS.—For the repaving of Hammersmith-road (part of) and Askew-road (part of), for the B.C. Mr. H. H. Clucas, Borough Engineer, Town Hall, Hammersmith, W.

DECEMBER 19.—**Newcastle-on-Tyne.**—ROADS, &c.—Construction of roads and sewers required for the Rochester-street dwellings, Walker, for the T.C. Housing Architect, 18, Cloth Market, Newcastle. Deposit £1 1s.

DECEMBER 26.—**Mull.**—ROADS.—Construction of 2½ miles of road in the Island of Coll, for the Argyll C.C. Mr. Arthur MacNaughton, Mull District Surveyor, Tobermory.

DECEMBER 29.—**Featherstone.**—SEWER.—For relaying of about 1¼ miles of 15 in. diameter outfall sewer (cast-iron and stoneware pipe), for the U.D.C. Mr. Samuel Chesney, Council Offices, Featherstone, near Pontefract. Deposit £2 2s.

Competitions.

(*See Competition News, page* 874).

Auction Sales, Tenders, etc.

DECEMBER 11. — **Guildford.** — Messrs. Joseph Hibbard & Sons will sell (by order of Messrs. Sutton & Co. (Guildford), Ltd., who are relinquishing business), in three lots (unless previously sold by private treaty), at the offices in Woodbridge-road, Guildford, very valuable main road modern freehold timber yard, store, and suite of offices, situated at 86A, Woodbridge-road, Guildford; also valuable freehold mill site, at Merrow. Auctioneers, as above.

DECEMBER 11. — **London, S.W.** — Messrs. Veryard & Yates will sell, without reserve, at 255, Clapham-road, S.W. (close to the "Swan," Stockwell), a stock of timber, fittings, and building materials from demolition of a commodious residence. Auctioneers, 365, Norwood-road, S.E.27.

✱DECEMBER 13.—**Barnet, Herts.**—Messrs. Harland & Son will sell, at Salisbury Hotel, Barnet, freehold well-established business premises and detached residence adjoining, known as "Stanhope," Arkley, Barnet, Herts, on main road from London to Watford. Auctioneers, 69, High-street, Barnet, Herts.

DECEMBER 13.—**London, E.C.**—Mr. Joseph Stower will sell, with vacant possession, freehold property containing the important area of about 75,000 ft., or nearly 1¾ acres, prominently and conveniently situated on the north side of and fronting the main Bow-road. Auctioneers, 43, Chancery-lane, London, W.C.2.

DECEMBER 13. — **London, S.E.** — Messrs. Veryard & Yates will sell without reserve, at 126, Norwood-road, S.E. (close to Tulse-hill and Herne-hill Stations), useful building materials, timber, &c., iron girders, York stone, paving, firewood, &c. Auctioneers, 365, Norwood-road, S.E.27. p4

✱DECEMBER 18.—**London, N.**—Messrs. Chas. R. Davis & Co. will sell, under a D/A, re W. E. Gann (trading as R. J. Gann & Son), by order of the Trustee, at Monnery Works, 26, Monnery-road, Junction-road, N.19, the builders' and decorators' materials and plant. Auctioneers, 285, Borough High-street, S.E.1.

Public Appointments.

✱DECEMBER 18.—**York.**—Clerk of Works required in Architect's Department, L. & N.E. Rly. (N.E. Area), commencing January 1, 1924, six months' probation and permanency to suitable man. Apply, with copies of three testimonials, to Mr. Stephen Wilkinson, F.R.I.B.A., Architect, London & North Eastern Railway, York.

✱DECEMBER 19.—**London, S.W.19.**—Fully qualified Building Inspector required by the Merton and Morden Urban District Council. Applications, with three testimonials, to Mr. C. J. Mountifield, Clerk to the Council, Council Offices, Kingston-road, Merton, S.W.19.

PROPOSED NEW BUILDINGS & OTHER WORKS.*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations:—T.C. for Town Council; U.D.C. for Urban District Council; R.D.C for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; L.C.C. for London County Council; B.C. for Borough Council; and P.C. for Parish Council.

ALTRINCHAM.—The local branch of the Young Women's Christian Association propose to provide new club room accommodation, and converting their present premises in Ashley-road into a women's hostel. The scheme is estimated to cost £8,000.

AMMANFORD.—The site of Public Hall will be ceded to Committee on December 24th, and work of erection will be immediately proceeded with. The local Miners' Welfare Committee has already received grant of £1,000 from Central Fund for project, and will receive additional £2,000 in March next.

ARDSLEY.—Plans passed by U.D.C.: Four houses at Bradford-road, Tingley, for Mr. Fred. Clough; 2 houses at Tingley, for Mr. H. Longden; house in Rein-road, W. Ardsley, for Mr. L. Carter; and a bungalow, Woodhouse-lane, E. Ardsley, for Mr. C. F. Lingwood.

AYR.—The Dean of Guild Court has passed plans for the erection of additional buildings to accommodate cattle and sheep at the Ayrshire Agricultural Association's showground at an estimated cost of £1,400. Plans were also passed for the erection of two houses under the Corporation's subsidy scheme—namely, house at Castlehill-road, for Mr. David Reid, 62, Grove-avenue, Hanwell, London, estimated cost, £800; and bungalow at Arran-terrace, for Mr. Robert Stewart, 122, George-street, Ayr, estimated cost, £925.

BARRY (GLAMORGAN).—The Ministry of Health has sanctioned the borrowing of £24,960 by the Barry U.D.C. for the purpose of proceeding with scheme for construction of a marine lake at Cold Knap; this sum represents only the initial work, the total estimated cost of completed scheme being £50,000.——Plans for new public reading rooms to be erected at Barry Island on site given by Plymouth Estate have been approved.

BATH.—The Housing Committee has decided to recommend the Council to invite tenders for the completion of the Englishcombe Park Housing Scheme by the erection of 86 more houses. The response to the scheme under which the Corporation arranged to grant subsidies has not been very encouraging.——Plans approved by T.C.: Warehouse, Shaftesbury-road.——The T.C. propose to construct a sewer from Bear Hall to Second-avenue, at a cost of £2,000.——Sanction to a loan of £9,118 has been received for an extension of the water supply to Lansdown and Langridge.

BATLEY.—At the last meeting of the Batley and District Hospital Board it was decided to proceed with an extension scheme. Tenders have been invited, and, subject to the approval of the Ministry of Health, an early start is to be made. Mr. W. Hanstock, of Batley, is the architect.

BEDDINGTON.—Plans passed by U.D.C.: Bungalow, Link-lane, for Mr. E. M. Swaby; two houses, Ploughlane South, for Mr. P. Crowley; four houses, The Newlands, Sandy-lane South, for Messrs. Gallbraith Bros., Ltd.; two houses, Senga-road, for Messrs. G. & C. Langley; two houses, Senga-road, for Mr. F. W. Allen; five houses, Bute-road, for Mr. S. Smith.

BEDWELLTY.—The architect (Mr. D. Price) has submitted estimate for proposed new bridge between Fleur-de-Lis and Tiryberth of £6,500. It is hoped grant will amount to half cost, leaving remainder to be shared by Bedwellty and Gellygaer U.D.C.'s.——The Ministry of Health has sanctioned erection, under the new Act, of 30 houses by U.D.C.——The Ex-Service Men's Organisation has applied to U.D.C. for land at Cefn Forest on which to build a club.——The Board of Guardians is arranging removal of workhouse infirmary inmates in order that buildings may be re-erected according to engineer's plans, the present structure being in imminent danger of collapse through subsidence. The question of erecting a nurses' home will also be considered by the Board.

BELFAST.—Plans passed: Four villas, Newtownards-road, Upper and Castlehill-road, for Messrs. W. McMillan & Son, architect, Mr. James Scott; two villas, Deramore-drive, for Mr. W. Clarke, architect, Mr. T. B. Eagar; rebuilding of premises at rear of Royal-avenue, for trustees of the late Mr. James Johnston, architects, Messrs. Blackwood & Jury; badminton hall, Sans Souci Park, for the Belfast Badminton Hall Co., architect Mr. D. W. Boyd, builder Mr. John Rainey; villa and motor house, Martinez-avenue, for Mr. W. R. Ogle; depot for Anglo-American Oil Co., on Connswater-road; four villas in Luxor-gardens, for Mr. James Smart; 17 villas, Hay Park-avenue, for Messrs. H. & J. Martin; shop and house, Newtownards-road, for Mr. W. McNeilly, architect, Mr. James Scott; shop and house, Divis-street, for Mrs. A. Hadly, architect, Mr. W. J. Convery; shop and house, Abingdon-street, for Mr. J. H. Dowling, architect, Mr. Thomas Callender; bakery, stabling and store, Holywood-road, for Messrs. D. Hill & Co., architect and builder, Mr. Robert Barton; two houses in Vere-street, for the York-street Flax Spinning Co., builders, Messrs. McLoughlin & Harvey; shop and store, Victoria-street, for Mr. John Kilpatrick, architect, Mr. Robert Lynn; shop and house, Great Victoria-street, for Mrs. M. Brown, architect, Mr. Hugh Gault; villa, Kincora-avenue, for Messrs. W. & J. Robinson, architect, Mr. R. D. Graham; garage, &c., King's-road, for Mr. James Hill, architect, Mr. C. A. Aickin; shop and stores, Oldpark-road, for Mr. A. M. Dougan, architect, Mr. C. A. Aickin; garage in Malone Park, for Mr. James McGiffin, architect, Mr. Robert Lynn; shop and house, Ellen-street, for Mr. John F. McKenna, architects, Messrs. E. & J. Byrne; garage, Malone-road, for Mrs. Mary Conlon, architect, Mr. C. McAlister; two villas, Wandsworth-road, for the architect and builder, Mr. George Mercier; pavilion in Deramore Park S., for the Collegians Football Club, architect, Mr. D. W. Boyd; Scouts' Hall, for the committee of the Townsend-street Presbyterian Church, builders, Messrs. H. & J. McKibbin; four villas, Sandown-road, for Mr. Fred Carroll, architect, Mr. Jackson G. Smith; nine villas, Martinez-avenue, for Mr. Samuel Nelson, architect, Mr. Robert Lynn; stores to bakery premises, Byron-street, for Messrs. Parks & Co., architect, Mr. Hugh Gault; shop and house, Cliftonville-road, for Messrs. H. & W. Pollock, architect, Mr. A. B. Dobson; villa, Cliftonville-road, for Mr. W. H. Taggart, architect, Mr. W. J. Walsh.

BERWICK.—Northumberland C.C. have agreed to the erection of a new bridge to span the River Tweed between the Royal Border Bridge and the Berwick Bridge, north of Tweedmouth Station on the Great North-road. The bridge will cross from Knowe Head directly into Marygate, the main street of Berwick. The estimated cost of the bridge and approaches, together with acquisition of land and buildings, is £160,000, including £10,000 for contingencies. The Ministry of Transport has expressed its willingness to contribute 75 per cent. of the cost, and the County Council will find 15 per cent. or £24,000. Berwick will contribute £10,000, leaving £6,000 to be charged equally between the County Council and Berwick.

BILSTON.—As a result of a combined subsidy, amounting to £100, the local builders are about to commence upon the erection of 50 houses at Moseley-road and 100 at Lunt.

BINGLEY.—Plans passed by U.D.C.: Bungalow at Hill Top Farm, for Mr. F. C. Rich; two bungalows at Lee-lane, Cottingley, for Mrs. S. Priestley; power house at Stanley Mills, Bingley, for Messrs. Geo. Ackroyd, junr.; house at Bromley-road, Bingley, for Messrs. W. & S. Bradley; and four bungalows at Bradford-road, Bingley, for Mr. T. Turner; semi-detached villa at West Green Gate Estate, for Messrs. Hall, Tinsley & Co.; lay-out plan for Housing Site, Wilsden-road, Harden, for the Bingley Housing Co., Ltd.: 14 houses at Wilsden-road, Harden, for the Bingley Housing Co., Ltd. (subject to M.H. sanction), and two houses for the U.D.C. at Low Laithes, Dowley Gap (subject to M.H. sanction).—The E.C. have received sanction to carry out the erection of a new cubicle at the Cross Flatts Council School and at the Technical School at a cost of £160 and £190 respectively.

BLAENAVON.—The Ministry of Health has held a public inquiry into the application of the U.D.C. to borrow £6,000 for the purpose of ferro-concreting one of its reservoirs to prevent leakage. The Inspector intimated that sanction for a twenty years' loan would probably be forthcoming.

BOLTON.—The Chorley Old-road Wesleyan Church proposes to extend the Sunday school premises.—Plans have been approved for a new residence at Townley's Hospital for the Medical Officer. This is part of a general scheme of extensions being considered by the Institutions and Improvements Committee, which includes the electrification of all the Farnworth Institutions, the Hospital, Fishpool, the Cottage Homes, and extensive alterations to the Laundry.—The Salesian Society of the Roman Catholic Religious Order have acquired "Thurleigh," Sharples Park, for £4,000, which they propose to adapt for a secondary school.

BRADFORD.—The Mental Deficiency Committee has approved the expenditure of £2,750 on alterations, improvements, and extensions to the Westwood Institution for females, at Clayton Heights.

BROMLEY.—Plans passed by T.C.: Mr. F. C. Carter, conversion of three shops into one shop; Mr. W. de C. Hudson, classroom, Oaklands, Sundridge-avenue; Mr. E. W. Pither, house, Park-avenue; Mr. P. A. Coad, house, Pines-road; Mr. B. Angell, house, Highfield-road; Mr. J. Randall Vining, house, Park-avenue; Messrs. Walters & Co., two bungalows, Avondale-road.—The Council has authorised the Baths Committee to have estimates prepared for an open-air swimming bath.

BRYNMAWR.—The Surveyor has reported to U.D.C. that it is probable grant of 75 per cent. of cost of reconstruction of Blaenavon-road will be forthcoming. The estimate is £10,000. The Ministry of Transport has asked for details of the proposed work. The architect reports that considerable repairs are necessary to majority of Council's ninety houses.

BURNLEY.—The parishioners of St. James' Church have decided to restore the Stoneyholme Mission Hall. An outlay of £900 will be necessary to make the building fit for parochial use.

BURY.—The Surveyor, Mr. J. A. Settle, has been instructed to prepare plans and estimates of cost for a new bridge at Hampson Mill.—Plans have been approved for the erection of 13 houses in Woodley-street, 18 houses in Second-avenue, Jericho, pair of semi-detached houses in Littlewood-avenue, detached houses in Walmsley-road, and a block of eight houses in Walhaw-road.

CARLISLE.—The Health Committee of the Carlisle Corporation have passed plans for the erection of 47 new houses in different parts of the city, 43 of which are eligible for subsidy.

CARMARTHENSHIRE.—The Llanelly Guardians have requested Borough Council to construct accommodation for families boarded out by Guardians.——The Pembrey School Managers have recommended the County Education Committee to acquire land on Newfoundland site for erection of central school.——The Ammanford U.D.C. has purchased land for lay-out as a public cemetery.

CHELMSFORD.—The T.C. has approved of plans for 24 houses, in blocks of eight, in Henry-road, for Messrs.

* See also our List of Contracts, Competitions, etc.

G. J. Hawkes & Son; 136 flats on the estate proposed to be laid out off Coval-lane, for Messrs. Gibbons & Davis; 12 houses at Galleywood, for Mr. John Rimmer; and other single buildings, totalling 176. All these were approved for the purposes of subsidy.

CHEPSTOW.—The Severn Tunnel Utility Building Society has applied for a £45 per house subsidy for erection of thirty houses, to be immediately commenced upon, from the Chepstow R.D.C. The Council has agreed to aid scheme. The building site is acquired on favourable terms from G.W.R., and will permit further house building.

CHESTERFIELD.—At the last meeting of the R.D.C. plans were approved for 100 houses in Robin-lane, Beighton, for the Sheffield Coal Co., Ltd., and it was resolved to apply for a loan to lay a water main to supply 200 houses which the Staveley Coal & Iron Co., Ltd., intend to erect at Sutton-cum-Duckmanton. A lay-out plan of a building site at Millthorpe, in the parish of Holmesfield, submitted by Messrs. Lancashire & Son, surveyors, Sheffield, was approved, subject to the new road which will connect with the existing road being 36 ft. wide, and to the other roads on the site being 30 ft. wide.

CHESTERFIELD.—Messrs. Markham & Co., Ltd., are to build 16 houses at Piccadilly.

CHORLEY.—Subject to certain conditions the Ministry of Health has agreed to sanction the borrowing by the T.C. of £50,000 for sewage extensions, &c.

COCKERMOUTH.—The R.D.C. has had plans and estimates prepared for a sewerage scheme for Crosby Low Side, and is to apply for a loan of £2,050.——The Ministry of Health has approved of the erection of 12 houses.

COVENTRY.—The Ministry of Health has approved of the proposals of the Board of Guardians for improvements at the Institution.

DROXFORD.—Six cottages at Waltham Chase, for Mr. L. A. Short.

DUNBAR.—At the last meeting of the Governors of the District Hospital the Surveyor was instructed to prepare plans and estimates for the erection of a new Cottage Hospital.

DUBLIN.—Plans passed: Rebuilding 23–24, Westmoreland-street, for Messrs. Isaacs; four houses, Hollybrook-road, Clontarf, for the City Building Co., Ltd.; extension of printing works, 55, Bolton-street, for Messrs. Mahon; 84 cottages, Clonliffe-road (Donnelly's Orchard), for the Corporation of Dublin; new premises, 59, Phibsboro', for Mr. M. Dunne.

EASTRY.—Plans passed by R.D.C.: C. Marshall, cottage, at Ash; alterations to block of houses, Woodnesborough-lane, Eastry, for Mr. E. May; new house, opposite Crispin public-house, Worth, for Messrs. Turner & Watts; drainage system at Stone Cross, Worth, for Mr. C. J. Britton.

EDINBURGH.—Dean of Guild Court sanctioned the erection of the first 32 houses at Marionville-road, Lochend, by the Corporation of Edinburgh. The houses will be in blocks of four, and each dwelling contains three rooms and a scullery. Thirty-two cases were before the Court, and 20 full warrants were granted including the following:—Niddrie and Benhar Coal Co.: 48 houses at Niddrie. The houses will be of three apartments and a scullery each; Mr. Alexander Matthew, four double and three single bungalows, at Corstorphine and Drumbrae-roads; Mr. W. C. Hedge, bungalow at Craiglockhart-avenue; Mr. Victor H. Beattie, bungalow at Drumbrae-road, Corstorphine; Mr. William Niven, bungalow at Drumbrae-road, Corstorphine; Mr. Robert King, villa at Cluny-gardens, Morningside; Murrayfield Real Estate Co., Ltd., two semi-detached villas at Murrayfield-drive; Mrs. J. Brown, four flatted houses at Muirend-avenue, Juniper Green; Mr. William Roberts, house at Barony-terrace, Corstorphine; Mr. Andrew Bremner, houses at Davidson's Mains; Newcraighall Workmen's Institute Trustees, Workmen's Institute; Mr. Robert Baird, convert self-contained house at Inverleith-gardens into three shops.——At the Dean of Guild Court 14 full petitions were presented, and nine were granted, including bungalow at Barony-terrace, Corstorphine; bungalow at Dovecot-road, Corstorphine; bungalow at Allermuir-road, Colinton; four cottages at Longstone-road.

EXETER.—The Housing Committee is reporting to the T.C. at its next meeting that tenders for building 45 houses on the Puddle-lane site have been received, and in view of the high amount of the building tenders the matter has been referred to Messrs. Hooper & Lee to consider the specifications with the City Architect, and submit recommendations with a view to reduction of costs. Tenders for building eight houses on the Isca-road site were also received, and the Committee recommended acceptance of the tender of Messrs. Stephens & Son, Ltd., for the erection, within nine months, for the sum of £4,000.

GLASGOW.—The Committee on Building Regulations have allowed plans for 33 houses at Muirhead, for Messrs. John Emery & Sons, which do not strictly comply with the regulations.

HATFIELD.—By the opening up of Brookman's Park Estate, on the Great North-road, 2 miles from Potter's Bar and 3 from Hatfield, considerable building developments are expected. It is estimated that there will be sites for 3,000 private houses.

KEIGHLEY.—Plans passed by T.C.: Four houses in Cliffe-street and Ivy-street, for G. Shephard & Co.; house in Damens-road, for Mr. Oliver Smith; house in Craig-street, for Mr. Thos. Rushworth; house in Aireville-street, for Mr. Joseph Neville; additions to Lund-street, for Mr. Ernest Lund; conversion of one house into two houses, for Mr. H. Jeffrey at Thwaites Brow; two houses at Raglan-street, for Mr. E. Dewhirst; two houses at Braithwaite-road, for Messrs. J. Nicholson and Norriss Judson; additions to Spring Gardens-lane, for Mr. Wignell Green, and additions to Beal-street and Beech-street, for Mr. Herbert Roberts.—Plans passed by R.D.C.: Two cottages at East Morton, for Mr. O. Craven. The Council have made application for sanction to erect 30 houses to the Ministry of Health. The T.C. have also made application to the Ministry of Health for sanction to erect five houses on the Broomhill Estate of the scullery type in order to fully utilise a section of the estate.

KIDDERMINSTER.—Plans passed by R.D.C.: Alterations to Wolverley Vicarage; and for the reconstruction of a building to form a cottage and garage, at the Vicarage, Wolverley.——Applications for the subsidy for the building of houses by private individuals have been received from Messrs. W. Hunt, Bewdley; J. Wheatley, Blakedown; and Mr. T. Ife, of Lancaster House, Wribbenhall.

LAMPETER.—A deputation of the promoters, and interested local authorities, of the Lampeter-Llandilo Light Railway scheme has waited on the Ministry of Transport, requesting grant towards the £160,000 estimated cost of construction. The result will be made known in due course.

LANCASTER.—Plans passed by T.C.: Conversion of a coach-house, &c., "Longlands," Sunnyside-lane, into cottage and garage, for Mr. James Morton.

LANCHESTER.—The Ministry of Health have sanctioned the erection of 100 houses by the R.D.C., in addition to a number which it is proposed to build by private enterprise. The houses will be of the two-story type, and not bungalows, the cost working out at £40 per house less.

LICHFIELD.—Mr. F. R. Phipps has conducted an inquiry on behalf of the Ministry of Health, into the application of the T.C. for sanction to borrow £2,900 for the purchase of land in connection with the proposed construction of new roads through the Friary Estate.

LLANDYSSUL.—The Ministry of Health has notified Council that an inspector of the Ministry will investigate the question of area water supply, in which a scheme has been formulated.

LONDON (POPLAR).—The L.C.C. has sanctioned the borrowing of £33,730 by the B.C. for housing purposes.

MERTHYR TYDFIL.—The Taf Fechan Water Board has given formal statutory notice of application for authority to construct aqueducts and pipe lines in Vaynor and Penderyn, waste water channel at Merthyr, several aqueducts and pipe lines at Merthyr, Pontypridd and Mountain Ash, and large scale extension and diversion schemes in the supply area of the Board. The Borough Education Committee has instructed preparation of estimates for considerable repairs necessary to Caldraw School.

MIDDLESBROUGH.—The Corporation has decided to purchase outlying portions of the Marton Hall Estate at a cost of £35,000. It was announced that, subject to this purchase, an anonymous donor had undertaken to buy the park and hall with a view to presenting them to the town. The park, which belongs to the famous Bolckow family, is more than 134 acres in extent.——The Corporation Plans Committee have approved of 40 sets of plans, including 31 houses, 17 of which are eligible for subsidy, and one for a Spiritualist Church in Grange-road West.——The London & North Eastern Railway Co. are advocating a scheme in Middlesbrough whereby workmen can build their own houses. The company are lending the necessary capital at 4 per cent., and have forwarded full details of the scheme to the Middlesbrough Corporation Housing Committee with a view to the development of the proposals.

MIDDLESEX.—The C.C. has received the consent of the Ministry of Health to borrow £566,513 for a period of five years in order to continue the arterial road works in the county and provide for the relief of unemployment.

MONMOUTHSHIRE.—The Nantyglo and Blaina U.D.C. has decided to ask the Ministry of Health to send a representative to confer with the Council on extensive re-flooring alleged to be necessary at certain Council houses at Ffosmaen.——The Crickhowell R.D.C. has received estimates (£1,850) for town water supply scheme, which is under consideration.

MONTROSE.—The Montrose T.C. and the Forfar County Road Society at a recent conference decided to submit plans for the strengthening of the Suspension Bridge at Montrose over the river South Esk, at an estimated cost of £50,000. An alternative scheme for the construction of a new steel girder bridge, at an estimated cost of £80,000, has also been submitted to the Ministry of Transport for their consideration.

NEWBURGH.—Plans for a further eight houses have been submitted by the Tayside Floorcloth Co.

NORTHWICH.—The Ministry of Health has sanctioned a loan of £45,000 as a first instalment towards the carrying out of the D.C.'s water scheme, the work to be immediately commenced to absorb local unemployed.

OGMORE.—The Ogmore and Garw Council has decided to ask the Rhondda Colliery Co. to make up the roads at Lewistown.

OVENDEN.—The Halifax Corporation have acquired a site at Beechwood-road upon which to commence a new housing scheme. The Corporation propose to erect 73 houses on this site, 31 parlour type and 42 non-parlour type, built in blocks of four, each house to have a bathroom upstairs.

PEMBROKESHIRE.—The Narbeth Council has directed its Finance Committee to consider advisability of inviting tenders for supply of stone for its £28,000 road scheme to be commenced upon. The Haverfordwest T.C. is seeking assistance in purchase of motor fire engine and equipment to value of £2,000, estimate. The Council has received a communication from Ministry of Transport stating that grant for make-up of Bridge-street is in consideration. The County Education Committee has forwarded the following building programme to the Board of Education for approval: Haverfordwest Grammar School, new physics laboratories, £2,500; Fishguard County School, new boundary and retaining walls, £250; Neyland Council School, extension of corridor system, £700; Milford Council School, new school for 450 scholars, £13,500; Ambleston Council School, new school (a deferred 1914 scheme), £3,000; Prendergast Council School, fireplaces, £200; St. David's Council School, new closets, £450; Milford Church of England School, repairs, £300.

PONTYPRIDD.—The U.D.C. is considering the laying of single tram track through the town and Taff-street, instead of present double line.

PORT TALBOT.—The Gas Manager has reported to the Borough Council that in order to double supply of gas the Council would be well advised to: (*a*) extend retort house at Aberavon to provide four beds of retorts with all necessary ironwork, furnace construction, &c., estimate £9,000, and (*b*) extend the building of retort house to twice its present length, at estimated cost £9,300. He estimated reinforcement of condenser plant, &c., at £2,500 to £3,000. A special committee will report.——The T.C. is endeavouring to procure site for erection of a public abattoir. The Council is considering the proceeding with a scheme for refuse destruction. The question of erection of a public hall at Aberavon is being investigated by a Council sub-committee. The estimate for building on site of Westgate House is £9,000. The Surveyor has been instructed to submit plans and estimates for bridge at Maesycwrt.

PRESTON.—Plans passed by T.C.: H. Heaton, for Lord Ardee, alterations to streets, Kilruddery-road; H. Heaton, for W. Beetham, 18 houses, Maresfield-road, Winckley-road, Kilruddery-road; J. W. Lee, for Messrs. Pike & Pottie, 2 bungalows, Powis-road; J. Eccles, 4 houses, Frenchwood-avenue; R. H. Muncaster, for G. A. Wootton, house and shop, Manchester-road; H. Heaton, for Messrs. Spencer & Abbott, 28 houses, Halsbury-street and Herschell-street; H. Heaton, for Messrs. Spencer & Abbott, 11 houses, Wadham-road and Oxford-street; H. Heaton, for Messrs. Spencer & Abbott, 8 houses, Tiber-street; M. Myres, for J. Pomfret, house, Woodplumpton-road; H. Heaton, for Mrs. F. M. Gray, house, Addison-road; W. G. Crosthwaite, for Messrs. Barnes and Ditchfield, 2 houses, Lambert-road; J. I. Blezard house, Windsor-avenue; Messrs. Swarbrick & Gaunt, for Messrs. Rider & Yates, 2 bungalows, Inkerman-street; Messrs. Swarbrick & Gaunt, 2 bungalows, Lytham-road; T. W. Archer, for Thomas Archer, house, West Cliff; W. D. T. Munford, for Mrs. M. Rigby, bungalow, Brockholes-brow; W. Radcliffe, house and shop, Selborne-street; W. W. Dickinson, 4 houses, Cadley-street; H. Hutchinson, for Mr. Hall, house, Deepdale-road; W. Smirk, 2 houses, Winmarleigh-road; E. J. Andrew, for Mrs. M. E. Lightfoot, bungalow, Fishwick-view; J. H. & W. C. Mangan, for G. Moorcroft, 4 houses, Woodside-avenue; H. Heaton, for J. E. Roscoe, house, Mulgrave-avenue; H. Heaton, for H. Higginson, house, Lytham-road; J. H. & W. C. Mangan, for J. Brown, 3 houses, Brook-street; J. Masheter, new street, Ashworth-grove, River Side, 6 bungalows, Ashworth-grove, 5 bungalows, Mellings Fold; F. Howorth, for T. N. Livesey, 2 houses, Hastings-road; E. J. Andrew for R. Breakell, house, Maitland-street; J. Miller, for Ashton Building Co., Ltd., alterations to lay-out, The Crescent; J. W. Taylor, for the Ashton Building Co., Ltd., 6 houses Type "A," 6 houses Type "B," The Crescent, and 6 houses, Type "C," First-avenue; J. W. Grange, 8 bungalows, Lytham-road; F. Howorth, for W. Collinson, six houses, Windsor-avenue; F. Howorth, for J. Pomfret, 36 houses, Windsor-avenue; F. Howorth, for Messrs. Hodgson & Crompton, 4 houses, Windsor-avenue; H. Hutchinson, for W. Wareing, house, St. Thomas-road; F. Howorth, for W. Titterington, new street, Woodlands-drive; J. H. & W. C. Mangan, for J. Sykes, house, Ribbleton-avenue; J. Davies, for Messrs. Davies & Quinn, two bungalows, Lytham-road; T. H. Shelley, house, Beech-street.——Funds are being raised by the parishioners of Heaketh Bank to defray the cost of the erection of a new church, about £3,000 is in hand. The Ribble Committee have resolved to extend the sidings at the Dock, at an estimated cost of £6,000; and to divert a road on the south side at a cost of £600. The Street and Buildings Committee have approved plans for the erection of 173 houses and 29 bungalows.

REDCAR.—The Corporation are inviting tenders for the erection of 42 cottages of dimensions to comply with the requirements of the Housing Act, 1923.

RHONDDA.—The U.D.C. has instructed the Clerk to proceed with arrangements for construction of arterial road from Rhigos to Treherbert, one of the Ministry of Transport schemes for connecting the North and South of Glamorgan and give relief to unemployment. The U.D.C. has forwarded the revised plans of model welfare centre to be erected at Mid-Rhondda to Ministry of Health for approval. This scheme is expected to cost over £30,000. The Surveyor has been instructed to proceed with laying of new main for water supply to Caroline-street, Blaenrhondda, estimate £300, and to prepare plans for erection of fifty new houses by the Council at Penygraig. Further to take steps for lay-out of Ynyshir allotments as a children's park under the Ynyshir Welfare Scheme.

RICCALL.—The R.D.C. has received plans from the East Riding County Council for the erection of a new infant school at the Selby end of New Bariby, and adopted them. The contract has been let to Messrs. J. H. Carr & Sons, of Selby.

RISHTON.—The Area No. 9 Education Committee have passed a resolution recommending that the arrangements for the establishment of a new Central School for Church and Oswaldtwistle should be proceeded with.

ROCHDALE.—The County Education Authorities are to erect a new school at Hallford. Plans have been approved by the Licensing Justices for structural alterations to the "Windmill" Inn, Sudden, for Messrs. Chadwicks (Walmersley) Brewery Co., Ltd., of Bury.

SEATON DELAVAL.—Mr. Benson Greenall, of the Ministry of Health, held an inquiry at the Miners' Hall into the application of the Seaton Delaval U.D.C. for approval of a preliminary statement of proposals for developments in connection with the town planning of the district. The result will be announced in due course.

SEDGEFIELD.—Plans passed by R.D.C.: Eighteen aged miners' homes at Dean Bank, Ferryhill, for the Aged Miners' Homes Committee; eight houses, Sedgefield-road, Fishburn, Mr. J. W. Lodge; house and shop, Cornforth-lane, Mr. Partridge; house and garage, Chilton, Mr. Coulson.

SHAW.—The plans for a new Central School have been approved by the Board of Education, estimated to cost £16,354, exclusive of furniture and fittings, for which separate estimates are to be submitted. The

(*Continued on p. 907.*)

PRICES CURRENT OF MATERIALS.*

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 2 0
Second Hard Stocks	3 17 0

Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Flettons, at King's Cross	2 15 3	Best Blue Pressed Staffs.	0 11 6
Do. grooved for plaster	2 15 3	Do. Bullnose	10 1 6
Do. Bullnose	3 8 3	Blue Wire Cuts	7 11 6
Best Stourbridge Fire brick :—			
2½ in.	11 3 0	3 in.	13 2 0
GLAZED BRICKS—			
Best White Ivory, and Salt Glazed Stretchers	22 0 0	D'ble Str'tch'rs	20 10 0
		D'ble Headers	27 10 0
		One Side and two Ends	31 10 0
Headers	21 10 0	Two Sides and one End	32 10 0
Quoins. Bull-nose and 4½ in.		Splays and Squints	30 0 0
Flats	28 10 0		

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	s. d.		s. d.
2 in. per yd. super	2 1	3 in. per yd. super	2 9
2½ in. "	2 5	4 in. "	3 7

	s. d.	
Thames Ballast	10 6	per yard.
Pit Sand	14 9	" "
Thames Sand	15 6	" "
Best Washed Sand	15 6	" "
½ in. Shingle for Ferro-Concrete	14 0	" "
¼ in. "	15 0	" "
½ in. Broken Brick	10 6	" "
Pan Breeze	5 6	" "

delivered 2 miles radius Paddington.

Per ton delivered in London area in full van loads.

Best Portland Cement, British Standard Specification Test £2 18 0 to £3 3 6

51/– alongside at Vauxhall in 80-ton lots.

Ferrocrete per ton extra on above	0 10 0
Super Cement	4 8 0
Roman Cement	8 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
" Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
" " White	3 12 6
" Fine	5 12 0
Sirapite, Coarse	3 9 6
" Finish	3 17 6
Grey Stone Lime	2 10 9
Chalk Lime	2 10 9
Best Ground Blue Lias Lime	2 13 6
Hair	17 0 0
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.

Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.

STONE.

	s. d.
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	2 9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube	2 11½
PORTLAND STONE—	
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube	4 4
Do. do. delivered on road wagons at above stations, per ft. cube	4 5
White basebed, 3d. per ft. cube extra.	
NOTE.—½d. ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.	
HOPTON-WOOD STONE.	
Delivered at any Goods Station. London.	
Small random blocks, up to 10 ft. cube. Per ft. cube	7/–
Random blocks from 10 ft. and over "	17/–
Sawn two sides "	27/–
Sawn three or four sides "	32/–
YORK STONE, BLUE—*Robin Hood Quality.*	
Delivered at any Goods Station London.	s. d.
6 in. sawn two sides landings to sizes (under 30 ft. super.) Per Ft. Super	5 3
6 in. rubbed two sides, ditto "	5 9
3 in. sawn two sides slabs (random sizes) "	2 1½
2 in. to 2½ in. sawn one side slabs (random sizes) "	1 5½
1½ in. to 2 in. ditto, ditto "	1 3
HARD YORK—	
Delivered at any Goods Station London.	
Scappled random blocks. Per Ft. Cube	5 6
6 in. sawn two sides landing to sizes (under 40 ft. super.) Per Ft. Super	5 4½
6 in. rubbed two sides ditto "	6 0½
4 in. sawn two sides slabs (random sizes) "	2 10
3 in. ditto. ditto "	2 5
2 in. self-faced random flags. Per Yard Super	7 11

ARTIFICIAL STONE.

	s. d.
Delivered in London Area in full van loads.	
Plain per ft. cube	6 6
Moulded " "	7 9
Cills " "	8 3

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£34 0	3 × 6	£25 0
4 × 9	34 0	3 × 11	34 0
4 × 8	29 0	2 × 11	24 0
4 × 7	28 0	3 × 9	33 0
3 × 8	26 10	2½ × 9	33 0
3 × 7	26 0	3 × 4½	24 0
2½ × 7	26 0	3 × 4	24 0

WOOD (*Continued*).

PLANED BOARDS.

1 × 11	£38 10	1 × 9	£30 0

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
½	21/–	1½	33/6
¾	23/–	1¾	38/6
1	26/6		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.	Inches	per sq.
1	28/6	½	17/6
1¼	33/6	¾	22/–
1½	38/6	1	26/–

MATCHINGS (BEST).

BATTENS

Inches	s. d.
½ × 2	2 4 per 100 ft.

SAWN LATHS.

Per bundle	0 2 10

Dry Wainscot Oak, per ft. super, as inch	0 2 0	to	0 2 6
½ in. do. do.	0 1 6	to	0 2 0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0 1 9	to	0 2 6
Cuba Mahogany	0 3 0	to	0 3 6
Teak (Rangoon, Moulmein or Java), per load	45 0 0	to	50 0 0
American Whitewood planks, per ft. cube	0 14 0	to	0 16 0
Best Scotch Glue, per cwt.	4 10 0	to	—
Liquid Glue, per cwt.	4 7 0	to	5 10 0

SLATES.

1st quality slates from Bangor or Portmadoc in truck loads delivered London area. Per 1,000 of 1,200.

	£ s. d.		£ s. d.
£4 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

	Per 1,000 f.o.r. London. £ s. d.
Best machine-made tiles from Broseley or	5 7 6
Staffordshire district	5 7 6
Ditto hand made ditto	5 12 6
Ornamental ditto	5 17 6
Hip and valley tiles (per dozen) Hand made	0 9 6
Machine made	0 9 0

METALS.

	£ s. d.
JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—	
R. S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
Stanchions	17 10 0
In "Roof Work"	20 10 0

MILD STEEL ROUNDS.
To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
½ in.	16 10 0	⅝ in. to ½ in.	13 10 0
⅜ in.	14 10 0	¾ in. to 2½ in.	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discount, carriage forward if sent from London Stocks.)

	Tubes.	Fittings.	Flanges.
Gas	52½%	52½%	62½%
Water	47½%	47½%	57½%
Steam	42½%	42½%	52½%
Galv'd—			
Gas	37½%	42½%	52½%
Water	31½%	37½%	47½%
Steam	25 %	32½%	42½%

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/1½	11d.	3½d.
3½ in.	1/2½	1/0½	3½d.
4 in.	1/4	1/1½	3½d.
4½ in.	1/5½	1/4	4d.
5 in.	1/7½	1/5½	5d.

O.G. GUTTERS.

3 in.	1/6½	1/2½	3½d.
3½ in.	1/6½	1/2½	3½d.
4 in.	1/7½	1/4	3½d.
4½ in.	1/9½	1/6½	4d.
5 in.	2/1½	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1½	1/8
2½ in. "	1/9½	1/4	2/0½
3 in. "	2/1½	1/8	2/5½
3½ in. "	2/6½	1/11½	2/10½
4 in. "	2/11½	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6fts plain	3 0	2 2½	2 8
2½ in. "	3 6	2 5½	3 3½
3 in. "	4 2½	2 8	4 0½
3½ in. "	4 7	3 3½	4 8½
4 in. "	5 1	3 9½	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
3 in. per yd. in 9ft. lengths	4 9	5 8	8 10
4 in. " "	6 3	6 8	11 4
5 in. " "	7 6	11 6	18 2
6 in. " "	8 10	14 4	23 5

	Per ton in London £ s. d.		£ s. d.
IRON—			
Common Bars	13 10 0	to	14 10 0
Staffordshire Crown Bars—good merchant quality	14 0 0	"	15 0 0
Staffordshire "Marked Bars"	17 0 0	"	18 0 0
Mild Steel Bars	12 10 0	"	13 10 0

METALS (*Continued*).

	£ s. d.		£ s. d.
Steel Bars, Ferro-Concrete quality, basis price	13 0 0	..	14 0 0
Hoop iron, basis price	16 10 0	..	17 10 0
" Galvanised	31 0 0	..	32 0 0
Soft Steel Sheets, Black—			
Ordinary sizes to 20 g.	15 0 0	..	16 0 0
" " " 24 g.	16 0 0	..	17 0 0
" " " 26 g.	18 0 0	..	19 0 0
Sheets Flat Best Soft Steel, C.R. & C.A. quality—			
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	21 10 0	..	22 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	22 10 0	..	23 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	24 10 0	..	26 10 0
Flat and Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	21 10 0	..	22 10 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	22 0 0	..	23 0 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	24 0 0	..	25 0 0
Sheets Galvanised Flat, Best quality—			
Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker	23 10 0	..	24 10 0
Best Soft Steel Sheets, 22 g. and 24 g.	24 10 0	..	26 10 0
Best Soft Steel Sheets, 26 g.	26 0 0	..	27 0 0
Cut Nails, 3in. to 6 in. (under 3in. usual trade extras.)	20 10 0	..	22 0 0

METAL WINDOWS—Standard sizes suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1/4 to 1/7 per foot super.

LEAD, &c.

	£ s. d.
(Delivered in London.)	
LEAD—Sheet, English, 4 lb. and up	41 10 0
Pipe in coils	42 0 0
Soil Pipe	45 0 0
Compo pipe	47 10 0

NOTE—Country delivery, 30s. per ton extra: lots under 3 cwt., 2s. per cwt. extra and over 3cwt. and under 5 cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. extra.

Old lead, ex London area, at Mills per ton	27 0 0	..	—
Do., ex country, carriage forward per ton	28 0 0	..	—

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
29/	45/–	76/–	153/–	246/–	510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/–	92/–	174/–	300/–	588/– per doz.

NEW RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in.	¾ in.	1 in.
39/6	60/–	116/6 per doz

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/–	14/–	23/–	30/–	42/– per doz

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1½ in.	2 in.
7/6	11/6	17/–	29/–	36/– 63/– per doz.

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in.
10/–	12/–	20/–	24/–	31/– per doz.

NEW RIVER PATTERN CROYDON BALL VALVES, S.F

½ in.	¾ in.	1 in	1½ in,	1¾ in.
35/–	56/–	98/–	162/–	228/– per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.

	1½ in.	1¾ in.	2 in.	3 in.
8 lbs. P. traps	33/–	41/–	50/–	101/– per doz.
8 lbs. S. traps	35/–	45/–	66/–	126/–

COPPER—	£ s. d.	
Strong Sheet per lb.	0 2 3	.. —
Thin "	0 2 4	.. —
Copper nails "	0 2 3	.. —
Copper wire "	0 2 4	.. —
TIN—English Ingots "	0 2 3	.. —
SOLDER—Plumbers' "	0 1 1	.. —
Tinmen's "	0 1 3	.. —
Blowpipe "	0 1 5	.. —

PAINTS, &c.

	£ s. d.
Raw Linseed Oil, in pipes per gallon	0 3 10
" " " in barrels	0 4 0
" " " in drums	0 4 3
Boiled " in barrels	0 4 4
" " in drums	0 4 7
Turpentine in barrels	0 0 6
" in drums (10 gall.)	0 0 9
Genuine Ground English White Lead, per ton (In not less than 5 cwt. casks.)	56 5 0
GENUINE WHITE LEAD PAINT— "Father Thames," "Nine Elms," "Park," "Supremus" and other best brands (in 14 lb. tins) not less than 5 cwt. lots per ton delivered	70 10 0
Red Lead, Dry (packages extra) per ton	43 0 0
Best Linseed Oil Putty per cwt.	0 16 0
Fiocco per cwt.	0 13 6
Size, XD Quality /kn.	0 [illegible]

(Concluded on next page.)

* The information given on this page has been specially compiled for THE BUILDER and is copyright. Our aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS (*contd.*)

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES AND IN SQUARES IN ORDINARY SIZES.

	Per Ft.		Per Ft.
15 oz. fourths....	3½d.	32 oz. fourths	8½d.
15 ,, thirds	4½d.	32 ,, thirds	10½d.
21 ,, fourths....	5d.	Obscured Sheet, 15 oz.	4d.
21 ,, thirds	6½d.	21 ,,	5½d.
26 ,, fourths....	6d.	Fluted 15oz. 6½d., 21oz.	9½d.
26 ,, thirds	7½d.	En'lled 15 ,, 5½d., 21 ,,	7½d.

Extra price according to size and substance for squarce cut from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
¼ Rolled plate	4½d.
⅜ Rough rolled	5½d.
½ Rough rolled	5½d.
Figured Rolled, Oxford Rolled, Baltic, Oceanic, Arctic, Stippolyte, and small and large Flemish white	6½d.
Ditto, tinted	9d.
Rolled Sheet	6d.
White Rolled Cathedral	5½d.
Tinted do.	7½d.

Cast Plate is same price as rough rolled.

VARNISHES, &c.

		Per gallon. £ s. d.
Oak Varnish	Outside	0 14 0
Fine ditto	ditto	0 16 0
Fine Copal	ditto	0 18 0
Pale Copal	ditto	1 0 0
Pale Copal Carriage	ditto	1 4 0
Best ditto	ditto	1 12 0
Floor Varnish	Inside	0 18 0
Fine Pale Paper	ditto	0 18 0
Fine Copal Cabinet	ditto	1 2 6
Fine Copal flatting	ditto	1 0 6
Hard drying Oak	ditto	0 18 0
Fine Hard drying Oak	ditto	0 19 0
Fine Copal Varnish	ditto	1 0 0
Pale ditto	ditto	1 2 0
Best ditto	ditto	1 12 0
Best Japan Gold Size		0 12 0
Best Black Japan		0 12 0
Oak and Mahogany Stain (water)		0 12 0
Brunswick Black		0 9 0
Berlin Black		0 14 0
Knotting (patent)		1 5 0
French and Brush Polish		0 17 6
Liquid Dryers in Terebine		0 9 0
Cuirass Black Enamel		0 7 0

PROPOSED NEW BUILDINGS.

(*Continued from page* 905.)

County Architect, Mr. Littler, 16, Ribblesdale-street, Preston, will carry out the work.

SKEGNESS.—Arising out of the proposal of the Foreshore Committee that the local authority should take up a loan of £10,000 for the development of the foreshore and front, the surveyor has prepared an approximate estimate of cost of a scheme totalling roughly £15,200, for the consideration of the Council. The items include a shelter arcade (100 ft. frontage, at £10 per ft.), £1,000; boating lake, pump house, gardens, ravine, ornamental bridge, £7,630; boat-house, shelter, and refreshment saloon, £1,500; "chine," £2,130; and terrace gardens (including four shelters), £2,950. In the event of the scheme being sanctioned, it is proposed to apply to the Unemployment Grants Committee for assistance.

SOUTH SHIELDS.—Plans passed by T.C.: Messrs. T. A. Page & Sons, for Messrs. A. J. Wares, Ltd., rebuilding of premises corner of King-street and Salem-street; Messrs. T. A. Page & Son, for Messrs. Jos. Johnson (Durham), Ltd., alteration to Westoe Brewery, Dunelm-street; Messrs. J. H. Morton & Son, for The National Unionist Workmen's Club, alterations to 26–28, Frederick-street; Messrs. T. A. Page & Son, for Messrs. George Thornton & Co., 30 semi-detached houses in Dulverton-avenue, Newbury-street and Reading-road; Mr. F. W. Newby, for Messrs. Henderson Bros., 36 semi-detached houses, West-avenue, Harton; Mr. F. W. Newby, for Mr. George Allan, house, Moore-avenue, Harton; Mr. F. W. Newby, for Messrs. Carruthers & Salt, two bungalows, West-avenue, Harton.

SOWERBY.—Mr. W. H. Collin, Inspector for the Ministry of Health, has concluded an inquiry respecting the petition of the U.D.C. for sanction to carry out two improvement schemes. It is seeking to clear Stansfield-court and district, also Old Causeway and district, of some 40 houses, on the ground that they are unhealthy areas. It also seeks power to erect 40 new houses, the whole scheme to cost £20,000.

SPOTLAND.—Plans have been approved by the Licensing Justices for structural alterations to the "White Lion Hotel," for Messrs. Chadwicks (Walmersley) Brewery Co., Ltd., of Bury.

STAINES.—Mr. C. G. Mitchell, an inspector of the Ministry of Transport, has held an inquiry into the U.D.C.'s application to borrow £12,000 for the reconstruction of footpaths in the district.

STAINFORTH.—Extensive building developments are taking place at Stainforth in South Yorkshire's newly-developed coalfield. Within the next twelve months it is anticipated that several hundred more houses will have been erected. There is also a prospect of new plans for several new churches being launched.

SWINTON (YORKS).—The U.D.C. has received sanction from the Ministry of Health for permission to borrow £50,000 for the purposes of erecting 50 houses. The combined subsidy of £100 is available for any local builder taking advantage of the Council's scheme.

TENBY.—The T.C. has passed plans and approved for subsidy grant for house, for Mr. John Thomas, Brynawel; new bungalow, for Mr. Lewis Kingdom, at North Cliff; six houses, at John Croft Street, for Mr. W. H. Phillips. Plan has also been passed for shop in Warren-street, for Mr. Alfred Francis. The G.W.R. Co. has arranged to confer with Council on the proposal to construct footpaths to the golf links.

TREDEGAR.—The Council has adopted and forwarded to Miners' Welfare Committee, for grants and approval, estimates as follows for conversion of Swan Pond in public park to an open-air swimming bath: concrete inside and glazed sides and floor, £2,240; filter beds, £527; water mains, £75; extras, £1,182; total, £4,034. —£890 being in hand for Tredegar War Memorial, the Committee has decided to erect monument in Bedwellty Park, and arrangements for work are to be at once made.

TYNEMOUTH.—The T.C. are making application to the Ministry of Health for sanction to borrow money for the following purposes: £20,620 for erection of new Council School at Spring Gardens, and £5,651 for permanent open-air school at Loraine Gardens, North Shields.

WALLASEY.—Plans passed by T.C.: Twenty houses in Cliff-road, for Mr. R. Jones; conversion of 22, Fort-street into two flats, for Mr. F. Westby; five houses, Sedbergh-road, for Mr. J. H. Lindley; garage in Marlborough-road, for Mr. G. Davies; dressing rooms at Wallasey Lodge Farm, Breck-road, for Messrs. Paul Bros.; two houses, Nelson-street, for Mr. W. H. Owens; shop and house in Albion-street, for Mr. D. J. Hughes; nine houses, Thirlmere-street, for Messrs. T. A. & E. A. Burrows; 12 houses in Comely-avenue, Messrs. T. A. & E. A. Burrows; two houses in Neville-road and Rullerton-road, for Mr. R. Jones; two houses in Marlowe-road, for Mr. W. Stocks; house in Lymington-road, for Mr. W. J. B. Bellis; 46 houses in Monmouth-road, for Mr. A. Macdonald; house at the corner of Cliff-road and Station-road for Mr. R. Jones; 12 houses, Station-road, Willoughby-road and Dawlish-road, for Mr. G. Peers; two houses in Lymington-road and Monmouth-road, for Mr. J. H. Lindley; conversion of 37, Seaview-road, into shop and dwelling house, for Mr. W. D. Burrows; two houses, Pendennis-road, for Messrs. E. J. & W. H. Jones; eight houses in Willoughby-road, for Mr. J. Henshaw; two garages at the rear of 38, Manor-road, for Mr. G. J. A. Burrows; house, Palmerston-road and Willoughby-road, for Messrs. J. McKee & Son.

WALTHAMSTOW.—Plans passed by U.D.C.: House, Falmouth-avenue, for A. Stapley; two houses, Malvern-avenue, for A. G. Barton; building for stalls and lock-up shops, extending from Willow-walk to Linden-road, for F. J. Mortimer; three cottages, junction of Hatherley-road and Campbell-road, for H. Hawthorn.

WEARDALE.—At the annual meeting of the Steel, Coal & Coke Co., held in Newcastle, it was stated that the directors had, in response to application from employees, decided to erect 200 houses, and that the number might be increased in the future.

WEMBLEY.—Mrs. Hyde-Thomson and Mr. R. H. Hyde-Thomson are presenting a sports pavilion to Harrow School Mission at North Wembley, in memory of the late Mr. C. H. Hyde-Thomson.

WILLESDEN.—Plans passed by U.D.C.: Houses, Donnington-road, Willesden, for Mr. A. L. Tolcher; lock-up shop, Percy-road, Kilburn, for Mr. R. G. Booth; house and garage, Harlesden-gardens, by Mr. J. Rowden, for Mr. S. S. Brealy; two houses and garages, Anson-road, Cricklewood, by and for Mr. H. Potter; electricity transformer house, Waxlow-road, Willesden, by Mr. T. W. Willard, for Messrs. McVitie & Price; nine houses, Brondesbury Park, by Mr. Stanley Allen, for Messrs. Western & Arnell; 12 houses, North Way, Neasden, for Mr. J. M. Goodwin; house, North Way, Neasden, by Mr. James Denton, for Mr. D. Smith; house, 2, Donnington-road, Willesden, by Mr. A. L. Tolcher, for Mr. J. Jones; institute and school-room, Acton-lane, Harlesden, by the Rev. E. F. Sutton, for the Harlesden Baptist Church; St. Mark's Vicarage at junction of Furness-road and Holland-road, Harlesden, by Messrs. Alder & Turrill, for the Rev. E. R. Whalley; two houses, Dollis Hill-lane, Cricklewood, by Mr. H. E. Beckett, for Broadway Properties, Ltd.; three shops, Normansmead, Brentfield Estate, by Mr. A. Franklin, for Messrs. Blincow, Shacklady & White.

YORK.—The London & North Eastern Railway Co. are going to enlarge the existing hotel motor garage at York to accommodate 100 cars. The scheme embraces several lock-ups for cars, waiting rooms for drivers, and vulcanising room, &c. A cottage at Nether-lane, Nafferton, is to be built by the London & North Eastern Railway Co. Plans passed by T.C.: City Picture Palace Co., dancing hall, &c., Fishergate; W. Johnson, house, 189, Bishopthorpe-road; Sir R. Newbald Kay, two houses, Beech-avenue; G. H. Pegg & Son, house, St. Clement's-grove; G. H. Pegg & Son, house and shop, Bishopthorpe-road; E. Relton, two houses, Carrington-avenue; Atkin Bros., three houses, Poppleton-road; G. H. Pegg & Son, 15 houses, Aldreth-grove, Cameron-grove, and Bishopthorpe-road; Sir R. N. Kay, two houses, Bishopthorpe-road; R. J. Parker, house, Moorgate.

FIRES.

ABERDEEN.—A destructive fire has occurred at the engineering works of Messrs. John Lewis & Sons, Pointlaw.

BRADFORD.—The four upper stories of a seven-story building at the junction of Nelson-street and Clarence-street, occupied by Messrs. Thomas W. Sowden & Co., wool merchants, and by Messrs. Henry Longbottom & Co., wool merchants, have been destroyed by fire. The premises were the property of Mr. Henry Cullingworth.

NEAR PONTYPRIDD.—Fire, on November 30, at the residence of Sir Rhys Williams, Bart., D.S.O., K.C., Miskin Manor, near Pontypridd, destroyed completely one wing of the building. Damage is estimated at £10,000. All art treasures were saved.

NEW INVENTION.

Fire Alarm.

THE Gravity Auto-mechanical Fire Alarm, a clever contrivance, is being demonstrated at the Institute of Patentees, 44, Great Russell-street, W.C. 1. It consists essentially of a flexible metallic cord, anchored at one end, traversing the building near the ceilings and having a weight suspended from its distant end. The weight is always pulling, keeping the cord taut. The cord is guided by small pulleys in the directions required to cover the area to be protected. A separate length of cord is used for each floor or each section of the building which is to be made fireproof, and the ends of the cords are brought to some central point where their weights are enclosed in a case. Into these cords are looped at intervals of about 20 ft. small flanged rings built up of brass stampings, held together by a fusible metallic alloy. Ten inches of cord are looped round each ring.

When a dangerous temperature is reached a ring or rings collapse, the looped cord is drawn out and the weight drops through a corresponding distance. The dropped weight shows a red band through an aperture in the case, so the locality of the fire is seen at the central indicating point. On falling, the weight trips a trigger which sets a large bell in continuous action—the bell being also weight-driven. This bell beats out a continuous alarm, which can be heard at a considerable distance from the building, and summons local aid. The weight also closes the ordinary telephone circuit, just as the lifting of the receiver does, and calls up the Exchange. Near the bell is a telephone transmitter, and this transmitter, so to speak, "hears" every blow of the bell, but by a contact disc on the bell movement is rendered "dumb" except at predetermined intervals, so turning the continuous sequence of blows into an intermittent code. The Exchange is therefore called, and the operator hears a number clanged out by the transmitted blows of the bell. This is recognised as a fire call, and connection is at once made with the fire station, where the same code number is heard many times repeated.

The General Post Office have, we understand, investigated the system, and have agreed to operate it in any part of the country, and the Chief Officer of the London Fire Brigade and other leading Fire Chief Officers have examined the system and expressed their approval.

The inventor is Mr. Chas. Smith, of Electra House, Moorgate, E.C.

Quantities.

In reference to the letter which appeared in our issue of November 23 under the pseudonym "Quantities," Messrs. Chapman & Hall, Ltd., inform us that they have just published a book, entitled "Quantity Surveying for Builders," by Mr. Wilfred W. Eversheld, in which the methods of measuring explained throughout the volume have been brought into agreement, where necessary, with the "Standard Method of Measuring of Building Works."

National Registration of Plumbers.

A conference under the auspices of the General Council for the National Registration of Plumbers was held at the Newcastle Town Hall, on November 30. Mr. H. D. Searle-Wood, F.R.I.B.A., of London, occupied the chair.

At the evening session, in the course of a paper prepared by Mr. W. D. Caroe, M.A., F.S.A., the lecturer said he wanted their craftsmen to claim their privileges; to get architects and public authorities to employ registered plumbers by preference; to ventilate the system of marking to distinguish their work; to improve funds in order to employ an organiser; to press for the proper teaching of technical and practical instruction in harmony with the registered system; and to encourage a scheme of apprenticeship.

In the discussion that followed, the speakers generally advocated that registration should be adopted by the trade.

CURRENT PRICES FOR BUILDING WORK IN LONDON.

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	6
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	35	0
Add if in underpinning in short lengths	" "	7	6
Add if in floors 6 in. thick	" "	3	6
Add if in beams	" "	4	0
Add if aggregate 1 : 2: 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	3	3

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	2	0	0

FACINGS.

		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

		s.	d.
Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

		s.	d.
Extra only to the price of ordinary brickwork :—			
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

		s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	1
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	" "	9	0
½ inch on flats in two thicknesses	" "	6	6
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	3

MASON.

		s.	d.
York stone templates fixed	per foot cube	12	6
York stone sills fixed	" "	21	6
Bath stone and all labour fixed	" "	10	6
Portland stone fixed	" "	19	6

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	5	3
Do. joists	" "	5	9
Do. roofs, floors and partitions	" "	6	3
Do. trusses	" "	8	3

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	38/-	44/-	50/-	80/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.		¾"	1"	1¼"	1½"
Deal-edges shot	per sq.		49/-	58/-	67/-
Do. tongued and grooved	"		54/-	65/-	72/-
Do. matchings	"	45/-	55/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	4
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	3	9

DOORS.		1¼"	1¾"	2"
Two-panel square framed	per ft sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	14	0

		1"	1¼"	1½"
Plain deal jamb linings framed	per ft sup	1/8	1/9	2/0
Deal shelves and bearers	"	1/5	1/7	1/10
Add if cross tongued	"	2d.	2d	2d.

STAIRCASES.

	1"	1¼"	1½"	2"	2½"
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. × 1¼ in.	per ft. run.	0	9
Mahogany handrail; average 3 in. × 3 in.	" "	6	0
Add if ramped	" "	11	10
Add if wreathed	" "	23	9

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/4
Sash fasteners	11½d.	Mortice locks	5/3
Casement fasteners	1/5	Patent spring hinges and letting in to floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	17	0
Plain compound girders	"	20	0
Do. stanchions	"	23	0
In roof work	"	28	0

RAIN-WATER GOODS.

		3"	4"	5"	6"
Half-round plain rebated joints	ft. run	1/11	2/4½	3/7	4/-
Ogee Do. Do.	"	2/4½	3/1	3/10	4/9
Rain-water pipes with ears	"	2/9	3/7		
Extra for shoes and bends	each	4/4	5/11		
Do. stopped ends	"	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	"	2/2	2/7	3/10	4/3

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt	54	0
Do. Do. in flats	"	52	0
Extra labour and solder in coated cesspools	each	6	9
Welt joint	per ft run	0	6
Soldered seam	" "	1	6
Copper nailing	" "	0	6

		½"	¾"	1"	1½"	2"	4"
Drawn lead waste	per ft. run	11d.	1/8	1/11	3/5	4/2	
Do. service	"	1/7	2/1	2/6	3/10		
Do. soil	"						6/10
Bends in lead pipe	each					3/3	8/2
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/6	
Red lead joints	"	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/6	9/9
Lead traps and cleaning screws	"				14/7	19/6	
Rib cocks and joints	"	6/4	9/7	15/4	41/-		
Stop cocks and joints	"	15/4	17/2	25/8	64/-		

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.	2	3
Do. Do. Sirapite	" "	2	6
Do. Do. Keen's	" "	3	6
Add sawn lathing	" "	1	5
Add metal lathing	" "	2	3
Portland cement screed	" "	1	10
Do. plain face	" "	3	0
Mouldings in plaster	per 1 girth	0	1½
One-and-a-half granolithic pavings	per yard sup	5	9

GLAZIER.

		s.	d.
21 oz. sheet plain	per foot sup	0	9
26 oz. Do.	" "	1	1
Obscured sheet	" "	1	3
¼ in. rolled plate	" "	0	9
¼ in. rough rolled or cast plate	" "	0	11
¼ in. wired cast plate	" "	1	3

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup	0	9
Knotting and priming	" "	0	7
Plain painting 1 coat	" "	0	9
Do. 2 coats	" "	1	2
Do. 3 coats	" "	1	9
Do. 4 coats	" "	2	4
Graining	" "	2	3
Varnishing twice	" "	1	9
Sizing	" "	0	3
Flatting	" "	0	7
Enamel	" "	1	1
Wax polishing	per foot sup	0	6
French polishing	" "	1	2
Preparing for and hanging paper	per piece	2/-	to 4/-

* These prices apply to new *buildings* only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire insurance. The whole of the information given on this page is copyright.

TENDERS.

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted*. † Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modifications*.

ABERTILLERY.—For supply to the Abertillery and District Water Board of 4 miles of 6 in. main steel pipes :—
*Stewarts & Lloyds, Birmingham £3,720

BATH.—For road widening at Brougham Hayes, for the T.C. :—
*Coles Bros. £2,540

BATH.—For supply and fixing of 144 yds. of iron fencing round Weston Reservoir, for the T.C. :—
*J. B. Bowler & Son..... per yd. 14s.

BATLEY.—Alterations and additions to Zion Chapel, Market-place, Batley, for the Trustees :—
*Herman Booth, Bradford-road, Batley.

BELFAST.—Erection of 146 cottages, for the T.C. :—
*J. & W. R. Taggart, Belfast.

BLAENGARW.—For laying out the Blaengarw recreation ground in connection with local welfare scheme, for the Ogmore & Garw U.D.C. :—
*Gaze, Ltd. Kingston-on-Thames £2,152 13 9

BOURNEMOUTH.—For supply of 120 street lanterns and wrought scroll irons, for the T.C. :—
*S. Pontifex & Co..... £235 10

BRIERLEY HILL.—For laying about 9,800 sup. yards sett paving, together with reinforced concrete foundations, kerbing, &c., for the U.D.C. Mr. John Yorke, Surveyor, Town Hall, Brierley Hill :—
W. H. Rogers, Willenhall..... £19,590

BRISTOL.—For erection of 40 houses on Fishponds Housing Site, for the T.C. City Engineer, Housing Department, 51, Prince-street, Bristol :—
10 *Parlour type and 6 non-parlour houses*—
*C. Bailey, Bristol..... £5,700
14 *Parlour type houses*—
*J. Knox, Bristol 5,600
8 *Parlour type, and 2 non-parlour houses*—
*E. R. Dyke, Bristol..... 4,000

CAERPHILLY.—For erection of Caerphilly Workmen's Library and Institute, comprising hall to seat 750 people, reading rooms, library, billiard room, games and committee rooms, and caretaker's quarters, for the Institute Committee :—
*J. H. Herbert & Co. £10,130

CHELMSFORD.—For wood paving, 773 sq. yds:. of New-street, for the T.C. :—
*W. Griffiths & Co..... per yd. 16s. 6d.

CHELMSFORD.—For alterations to Rainsford House, for the T.C. :—
*F. J. French..... £235

CHESTERFIELD.—Erection of 16 houses in Piccadilly, for Messrs. Arthur Markham & Co., Ltd. :—
*A. Markham & Co., Ltd.

DONCASTER.—For construction of 12 in. sewer, about 700 yds. long, Warmsworth, and about 640 yds. on land adjoining the Colliery Co.'s sidings, for the R.D.C. Mr. W. R. Crabtree, Surveyor, Nether Hall, Doncaster :—

C. Sprakes & Sons, Doncaster..	£4,217 17 6
A. Storey, Doncaster.....	3,045 17 9
A. Graham & Sons, Doncaster	2,857 14 9
Provincial Construction Co., Sunderland	2,239 2 6
*Firth & Whittington, Ltd., Doncaster.....	2,060 0 0

DUMFRIES.—For extensions to electricity works, for the T.C. :—
*J. Halliday & Sons, Dumfries..... £2,168

DUMFRIES.—For erection of reinforced concrete cooling tower at electricity works for the T.C. :—
*Premier Cooling & Engineering Co. £886

EASTBOURNE.—For road work, for the T.C. :—
*J. Bodle, Ltd..... £852 1s. and £898

EASTBOURNE.—For the erection of convenience at Meads-road, for the T.C. :—
*G. Slade & Co..... £701

ENFIELD.—For construction of sewage disposal works at Cuckoo Hall-lane, for the U.D.C. Mr. H. R. Crabb, Surveyor, Public Offices, Enfield :—
*W. & C. French, Buckhurst Hill.

GLUSBURN.—Lay-out of public park in Lothersdale-road, Cross Hills, for the Glusburn P.C. :—

Mason's work—	
*H. Kershaw, Ltd., Keighley ..	£883 3 5
Plumber and Painter—	
*A. Riddiough, Cross Hills.....	82 18 6
Joiner—	
*G. Laycock, Cross Hills	67 0 0
Slater—	
*A. Garnett, Sutton Mill.....	37 7 6
Plasterer—	
*F. Davy, Cross Hills	22 17 4
Horticultural work—	
*H. Kershaw, Ltd., Keighley ..	282 5 8

HAYES.—For making-up various streets, for the U.D.C. Mr. D. C. Fidler, Surveyor, Council Offices, Hayes, Middlesex :—

Ballard & Newby, Ramsgate..	£6,935 2 4
Campbell Kenyon & Co., Ltd., Acton, W.3	6,358 10 3
Sir Wm. Prescott & Sons, Ltd., London Wall, E.C.2	6,357 1 6
J. Cronk & Sons, Brixton, S.W.2	5,821 3 4
P. Shepherd & Co., Ltd., Acton, W.3	5,666 7 11
Parr-Head & Clements Knowling, Ltd., Ealing, W.5....	5,537 0 0
Wm. Walkerdine, Ltd., Kensington	5,491 18 9
W. Shepherd & Sons, Ltd., Rochdale	5,221 16 1
*J. Mowlem & Co., London, S.W.1	5,178 6 7
Black Rock Quarries, Ltd., Bristol	5,092 6 4
Surveyor's Estimate	5,829 4 6

HAYES.—For making-up Station-road, for the U.D.C. Mr. D. C. Fidler, Surveyor, Council Offices, Hayes, Middlesex :—

Campbell, Kenyon & Co., Ltd., Acton, W.3	£4,995 13 7
Sir Wm. Prescott & Sons, Ltd., London Wall, E.C.2.....	4,948 14 4
Wm. Walkerdine, Ltd., Kensington	4,869 16 3
J. Mowlem & Co., London, S.W.1	4,677 8 0
*J. Cronk & Sons, Brixton, S.W.3	4,640 0 0
Surveyor's Estimate	5,056 9 11

HORNSEY.—For the extension of the Cottage Hospital, for the Hospital Council :—

Trollope & Colls	£12,544
McCormick & Sons	12,345
Chas. K. Price	12,050
C. W. Scott	12,048
F. Cottrell, Ltd.....	11,896
Patman & Fotheringham	11,561
A. E. Porter	11,238
Dove Bros.	11,225
Albert Monk	10,876
H. Knight & Sons	10,841
G. E. Everett & Sons	10,795
*Mattock & Parsons	10,733

HULL.—For erection of first portion Dairycoates School, Hessle-road, for the T.C. Mr. J. H. Hirst, City Architect, Guildhall, Hull :—
*A. J. Darnley & Son, Hull £9,455 18

INVERKEITHING.—For erection of 10 houses at Spenderfield site, for the T.C. Mr. Peter Reid, architect. Park House, Inverkeithing :—
Mason and brickwork—
R. Durie & Sons, Inverkeithing.
Joiner work—
Anderson & Walker, Dunfermline.
Slater and Harling—
J. Robertson & Son, Dunfermline.
Plumber work—
D. Stewart, Inverkeithing.
Plaster and cement work—
Wm. Lambert, Inverkeithing.

KEIGHLEY.—For laying of concrete pipe drain in Banks-lane, for the R.D.C. :—
*T. Moore, Keighley £229

LEEDS.—Erection of an imbecile block at the Beckett-street Union Infirmary, for the Leeds Board of Guardians :—
*J. H. Wood & Co., St. Columba-street, Leeds.

LEEDS.—Extensions to nurses' dining rooms at the Beckett-street Institution, for the Leeds Board of Guardians :—
*Wm. Thompson & Sons, Stoney Rock-lane, Leeds.

LEEDS.—Erection of a telephone exchange at Headingley, for the Commissioners of H.M.O.W., King Charles-street, London :—
*Wm. Irwin & Co., Ltd., Burley-road, Leeds.

LINTHWAITE.—Erection of 10 concrete houses, for the U.D.C. :—
‡J. Winpenny & Co., Linthwaite £3,965 4 4

LLANELLY.—For erection of vagrants' ward at the Workhouse, for the Llanelly Board of Guardians :—

Gathen Co.	£2,750
G. Mercer	2,648
B. Howells & Son	2,513
Hughes Bros.	2,500
Isaac Jones, Llanelly	2,248
Architect's Estimate	2,150

‖Accepted subject to Ministry of Health sanction.

LONDON.—For repairs to 203, Lavender-hill, S.W., for the Metropolitan Water Board :—

Somerford & Sons	£149
*Sidney & Harvey	139

LONDON.—Provision of 4 in. Deacon waste meters, for the Metropolitan Water Board :—
*Palatine Engineering Co. £600

LONDON.—For laying hard mastic asphalte in Baildon-street, for the Deptford B.C. :—
*Val de Travers Asphalte Paving Co... 5s. 3d. per yd. super and five years' maintenance.

LONDON.—For renewal of 14 in. pipes of North Woolwich rising main, for the L.C.C. :—

Crawford Bros.	£17,652 2 3
Daniel T. Jackson	16,932 0 6
Whittaker-Ellis, Ltd.	15,396 2 7
*Heward Farrow, N.W.	15,374 10 8

LONDON.—For supply of flaps required in connection with the construction of south-western storm relief sewer, for the L.C.C. :—

J. Blakeborough & Sons.....	£1,482
G. Waller & Son	1,450
Ham, Baker & Co.	1,170
John Cochrane (Barrhead), Ltd.	1,103
Clayton, Goodfellow & Co.....	1,050
*Lilleshall Co., Oakengates	1,020

LONDON.—For the supply of five pairs of 10 cub. ft. gas holders, with the necessary testing tables and fittings, for the new Finsbury gas meter testing office, for the L.C.C. :—

George Glover & Co., Ltd.	£1,435
The Gas Meter Co., Ltd.	1,410
*Parkinson & W. & B. Cowan, Ltd., E.C.	1,350
Thomas Glover & Co., Ltd...	Not to specification.

LUDDENDENFOOT.—Erection of four houses of the parlour type, for the U.D.C. :—
‡*Mason*—T. Wold.
‡*Joiner*—S. Senior.
‡*Plumber*—J. H. Boocock.
‡*Plasterer*—Lumb Bros.
‡*Slater*—W. Royle & Co.
‡*Painter*—H. Harriss.
£526 9s. per house.

NEWENT.—For adaptation of premises of Poor Law Institution, for use as secondary school, for the Gloucestershire E.C. :—
*F. J. Simonds, Gloucester.... £4,827 14 9

NUNEATON.—For the improvement of part of Coventry-Nuneaton main road known as Griff Hollow, for the T.C. :—
*W. H. Green £4,922 8 9

PENYBONT.—For improvement of Aberkenfig Park-road, for R.D.C. :—
*E. C. Parker, Neath..... £148 12 6

PONTEFRACT.—For erection of Infirmary Block at Poor Law Institution, for the B.G. Messrs. Tennant & Smith, architects, Ropergate, Pontefract :—
*Fred Tree, Ferrybridge £17,166 15 10

PONTEFRACT.—Erection of new hotel on the Airedale Housing Site, for Messrs. John Smith's Tadcaster Brewery Co., Ltd. Messrs. Garside & Pennington, architects, Pontefract :—
*R. Groves, Goldthorpe, near Doncaster.

PRESTON.—For supply and fixing hot-water service at lavatories of the Town Hall, for the T.C. :—
*J. Pilkington, Preston..... £148 15

SALFORD.—For heating and hot-water services at Ladywell Sanatorium, for the T.C. :—
*Saunders & Taylor, Manchester.... £5,777 10

SALFORD.—For reconstruction of Littleton-road, for the T.C. :—
*J. H. Bradshaw, Ltd., Manchester £6,628 4 1

SALFORD.—For making-up Upper Park-road, for the T.C. :—
*W. H. Worthington, Ltd., Manchester £7,147 10

SKEGNESS.—For erection of cafe, restaurant, shops, &c. Messrs. Sheppard & Lockton, architects, 24, Castle-street, Newark-on-Trent :—

W. Greetham & Co., Skegness ..	£8,882 0 0
E. Lill, Skegness	8,855 10 0
J. G. Holmes & Son, Skegness..	8,093 0 0
J. Turner & Son, Wainfleet ..	8,000 0 0
E. Pumfrey, Ltd., Gainsborough	7,904 0 0
*J. Crawshaw, Skegness	7,899 8 11

STAIRFOOT (NEAR BARNSLEY).—For the erection of 16 houses at Stairfoot, near Barnsley :—
*W. Storrs..... per house £350 18 9
Total £5,935 0 0

SOUTH SHIELDS.—For construction of extension of engine room at Electricity Works, for the T.C. :—
*J. G. Thompson South Shields £5,375 14

SOUTH SHIELDS.—Construction of second portion of relief culvert from Stanhope-road to River Tyne, for the T.C. :—
*J. G. Thompson & Co..... £42,954 18 1

STOCKTON-ON-TEES.—For interior painting at the hospital, for the B.G. :—
*F. Atkin & Co..... £156

TROWBRIDGE.—For construction of 90 yds. of salt-glazed pipe sewer, &c., for the U.D.C. The Surveyor, Council Offices, Trowbridge :—

A. J. Dore & Co., Bristol.....	£426 1 0
W. R. Moody, Chippenham....	390 0 0
E. Ireland, Bath.....	349 7 6
*Ed. Linzey & Son, Trowbridge..	326 9 0

WAKEFIELD.—Extensions to Albion Mills, Ingsroad, for Messrs. M. P. Stonehouse & Co., Ltd. :—
Asphalter's work to roofs and gutters—*The Limmer and Trinidad Lake Asphalte Co., Ltd., Manchester.

WAKEFIELD.—Conversion of Thornes House into Secondary School, for the Governors. Mr. W. H. Watson, architect :—
Mason—A. C. Green.
Painting—C. Turner & Sons.
Joiner—M. Mountain.
Steelwork—Syd. Raynes.
Slater—F. Sedgwick & Son.
Asphalter—Tunstall's Rock Asphalte Co., Ltd.
Plumbing—H. Ellis.
Plasterer—T. E. Senior.
*£4,274 13 5d.

WALLASEY.—Supply of steel pontoon for Seacombe Ferry landing stage, for the T.C.:—
*A. Rutherford & Co., Birkenhead.... £1,150

WALLASEY.—For supply and fixing of railings at St. George's Park, for the T.C.:—
*T. Blackburn & Sons, Preston..... £196

WANTAGE.—For connecting houses at Harwell to sewerage system, for the R.D.C.:—
*E. & H. J. Gregory..... £264

WICKFORD.—Erection of footbridge over Neverdon-road, for the Essex C.C.:—
*W. & C. French £126

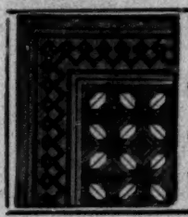
WITHINGTON.—For alterations to branch bank of the Union Bank of Manchester, Ltd., Wilmslow-road, Withington:—
W. D. Scott & Co., Cheetham.

TRADE NEWS.

A new waterproofing material has been brought to our notice called "Sika," and the special points the makers claim with regard to it are that it makes Portland cement or concrete set in less than a minute, and the time of setting can be regulated. Also it is claimed that it stops leakage immediately without relieving the water pressure. "Sika" is prepared in the form of liquid, and we are informed that when it was applied outside a sewage tank it stopped leakage against considerable pressure of water. The agent for London is Mr. G. H. Smith, of 25, Stratford Place, N.W.

Messrs. Hartley & Sugden, Ltd., of Halifax, are placing on the market two new and improved models of "Thermostoves." The two new models embody the following improvements:—Increased size of oven, which is now 16 in. wide by 14 in. high by 15 in. deep, and an entirely new feature applied to ovens is the sliding oven doors—these doors slide as if on ball-bearings—obviating the necessity of removing pans from the hot plate when attending to the oven. The hot-plate surface has been considerably enlarged. The grate is now fitted with a foot pedal for shaking purposes, and two nickel-plated towel rails are fitted.

We have received from Messrs. Cafferata & Co., Ltd., a copy of their "Murite" booklet, in which they say "that in all operations involving the use of plaster the question of time invariably presents something of a problem. The relatively low cost of lime plaster has determined the general adoption of this medium for everyday work. Highly alkaline properties render lime plaster unsuitable for many kinds of decorative treatment. In certain cases lime plastering tends to destroy the colour of wall paper and some distempers entirely fail to get a 'hold' on its surface and can be rubbed off as soon as dry. The introduction of a plaster, therefore, which overcomes all these defects at a practical price introduces a new epoch in the history of plastering. Prolonged research has finally produced in 'Murite,' a gypsum plaster whose results are equal, if not superior, to the best hitherto obtainable, and whose first cost brings it within the scope of every estimate."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